

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE:

GENERAL MOTORS LLC IGNITION
SWITCH LITIGATION

No. 14-MD-2543 (JMF)

This Document Relates to:

ALL ACTIONS

**PLAINTIFFS' STATEMENT OF UNDISPUTED MATERIAL FACTS PURSUANT TO
LOCAL RULE 56.1 IN SUPPORT OF PLAINTIFFS' OPPOSITION TO GM'S MOTION
FOR SUMMARY JUDGMENT AGAINST THE BELLWETHER
ECONOMIC LOSS PLAINTIFFS**

TABLE OF CONTENTS

	<u>Page</u>
I. ALL VEHICLES SUBJECT TO RECALL NO. 14V047 HAVE DEFECTIVE IGNITION SWITCHES.....	1
A. GM knowingly sold vehicles with defective, low-torque Delta Ignition Switches.	2
1. GM knowingly released vehicles with the Defective Ignition Switch.....	3
2. GM secretly redesigned the Defective Switch in new models beginning with the 2007 model year.	6
3. The modified Delta switch with the Catera plunger was also defective, and GM knew it.	7
a. Torque testing revealed the defect, and GM was aware of moving stalls in vehicles with the redesigned Delta switch.	8
b. In 2014, GM had to modify the production process in order to use the Delta switches as replacement parts in the 2014 recall repairs.	11
B. The 14v047 vehicles still have a knee-key defect due to the low placement of the switch on the steering column.....	13
II. ALL VEHICLES SUBJECT TO RECALL 14V355 HAVE DEFECTIVE IGNITION SWITCHES.....	19
A. The switches in the vehicles subject to Recall No. 14v355 are defective because they have low torque.....	20
B. The 14v355 vehicles still have a low-torque defect.....	24
C. The 14v355 vehicles still have a knee-key defect.	26
III. ALL VEHICLES SUBJECT TO RECALL 14V394 HAVE DEFECTIVE IGNITION SWITCHES.....	27
A. The switches in the vehicles subject to Recall No. 14v394 are defective because they have low-torque.	27
B. The 14v394 vehicles still have a low-torque defect.....	31
C. The 14v394 vehicles still have a knee-key defect.	33

IV.	ALL VEHICLES SUBJECT TO RECALL 14V400 HAVE DEFECTIVE IGNITION SWITCHES.....	34
A.	The switches in the vehicles subject to Recall No. 14v400 are defective because they have low-torque.	35
B.	The 14v400 vehicles still have a low-torque defect.....	40
V.	ALL VEHICLES SUBJECT TO RECALL 14V346 HAVE A KNEE-TO-KEY DEFECT	42
VI.	ALL VEHICLES WITH IGNITION SWITCH DEFECTS ALSO SUFFER FROM A SINGLE-POINT-OF-FAILURE DEFECT.....	45
VII.	PLAINTIFFS WERE DAMAGED.....	50
A.	Safety is a materially important factor to consumers generally, and Plaintiffs specifically, in considering the purchase or lease of a GM vehicle.	50
B.	Plaintiffs have suffered consequential damages in the form of lost time spent obtaining recall repairs.	55
VIII.	GM KNEW OF DEFECTS ON ITS FIRST DAY OF EXISTENCE	56
IX.	PLAINTIFFS SUBJECT TO THE SUMMARY JUDGMENT MOTION	63
A.	California Plaintiffs.....	63
1.	Patricia Barker	63
2.	Chimen Basseri	65
3.	Michael and Sylvia Benton	66
4.	Kimberly Brown-Shipley.....	68
5.	Kellie Cereceres	71
6.	Crystal Hardin.....	72
7.	Javier Malaga	73
8.	Winifred Mattos	75
9.	Santiago Orosco	76
10.	David Padilla.....	78

11.	Esperanza Ramirez.....	80
12.	William Rukeyser	81
13.	Michelle Thomas	83
B.	Missouri Plaintiffs.....	85
1.	Brad Akers	85
2.	Deloris Hamilton.....	89
3.	Cynthia Hawkins.....	89
4.	Kenneth Robinson.....	92
5.	Ronald Robinson.....	93
6.	Mario Stefano.....	95
7.	Christopher Tinen	96
8.	Patrice Witherspoon.....	98
C.	Texas Plaintiffs	101
1.	Gareebah Al-ghamdi.....	101
2.	Dawn Bacon.....	104
3.	Dawn Fuller	105
4.	Michael Graciano.....	107
5.	Lisa McClellan.....	110
	CERTIFICATE OF SERVICE	114

Pursuant to Local Rule 56.1(b), Plaintiffs respectfully submit the following Statement of Undisputed Material Facts:

I. ALL VEHICLES SUBJECT TO RECALL NO. 14V047 HAVE DEFECTIVE IGNITION SWITCHES

1. Recall No. 14v047 covered the following 2,190,934 vehicles for the Delta Ignition Switch Defect: 2005-2010 Chevrolet Cobalt, 2006-2011 Chevrolet HHR, 2007-2010 Pontiac G5, 2007-2010 Saturn Sky, 2003-2007 Saturn Ion, and 2006-2010 Pontiac Solstice. Ex. 3 (Feb. 24, 2014 14v047 Recall letter).¹ Approximately 312,323 of these vehicles were sold or leased as new after GM's inception. *Id.*

2. GM described the defect, cause, and effect as follows:

General Motors has decided that a defect which relates to motor vehicle safety exists in 2005-2007 model year Chevrolet Cobalt and 2007 model year Pontiac G5 vehicles. The ignition switch torque performance may not meet General Motors' specification. If the torque performance is not to specification, the ignition switch may unintentionally move from the "run" position to the "accessory" or "off" position with a corresponding reduction or loss of power. This risk may be increased if the key ring is carrying added weight or the vehicle goes off road or experiences some other jarring event. The timing of the key movement out of the "run" position, relative to the activation of the sensing algorithm of the crash event, may result in the airbags not deploying, increasing the potential for occupant injury in certain kinds of crashes. Until the recall repairs have been performed, it is *very* important that customers remove all items from their key rings, leaving only the vehicle key. The key fob (if applicable) should also be removed from the key ring. [*Id.* (emphasis added).]

3. The first recall announcement was made on February 7, 2014, when GM notified NHTSA of its decision to issue a recall for the following vehicles: 2005-2007 model year ("MY") Chevrolet Cobalt; and 2007 MY Pontiac G5. In March 2014, GM expanded the recall to include the 2006-2007 Chevrolet HHR and Pontiac Solstice, 2003-2007 Saturn Ion, and 2007 Saturn Sky. Ex. 4 (Mar. 11, 2014 14v047 Recall letter).

¹ All "Ex. ___" references cited herein are to the Declaration of Steve W. Berman in Support of Economic Loss Plaintiffs' Motion to Certify Bellwether Classes in California, Missouri, and Texas (Dkt. No. 5848, previously filed in connection with Plaintiffs' motion for class certification).

4. In April, GM expanded the recall again to cover over 820,000 additional vehicles, explaining that a defect relating to motor vehicle safety existed in “service parts” and kits used to repair certain vehicles:

The ignition switch torque performance on vehicles repaired with GM Parts and ACDelco Ignition & Start Switch part number 10392423 or assemblies that contain part number 10392423 may not meet General Motors’ specification. If the torque performance is not to specification, the ignition switch may unintentionally move from the “run” position to the “accessory” or “off” position with a corresponding reduction or loss of power [and] may result in the airbags not deploying, increasing the potential for occupant injury in certain kinds of crashes. . . . [Ex. 5 (Apr. 11, 2014 14v047 Recall letter.)]

A. GM knowingly sold vehicles with defective, low-torque Delta Ignition Switches.

5. In May 2014, GM entered into a Consent Order with NHTSA and admitted that, by not disclosing the Delta Ignition Switch Defect, it violated the Transportation Recall Enhancement, Accountability and Documentation Act (TREAD Act), codified at 49 U.S.C. §§ 30101-30170. GM later agreed to a Deferred Prosecution Agreement (DPA) with DOJ and consented to the filing of an Information charging it with a scheme to conceal the deadly defect in violation of 18 U.S.C. § 1001, and committing wire fraud in violation of 18 U.S.C. § 1343. Ex. 6 (DPA).

6. As part of the DPA, GM *agreed* to a “Statement of Facts” (the DPA SOF) demonstrating that GM, from its inception, knew that millions of Old GM vehicles were sold with defective low torque ignition switches. GM concealed this knowledge from the public and regulators until the recalls in 2014. GM “also falsely represented to consumers that vehicles containing the defect posed no safety concern.” Ex. 6 at ¶ 3 (DPA, Ex. C SOF). GM also admitted that it misled consumers. *Id.* at ¶ 10.

1. GM knowingly released vehicles with the Defective Ignition Switch.

7. GM's Component Technical Specification for the Defective Switch in vehicles include in NHTSA Recall No. 14v047 requires that the torque necessary to move the ignition switch from "Run" to "Accessory" must be 20 Newton centimeters (N-cm) plus or minus 5 N-cm, resulting in a range of 15 to 25 N-cm (the Torque Specification). Ex. 6 at ¶ 20 (DPA, Ex. C SOF). In 2001, GM's design release engineer, Ray DeGiorgio, gave switch design specifications to Delphi, the supplier (the Switch Supplier). "Among the specifications communicated to the Switch Supplier was that the torque necessary to move the switch from Run to Accessory must be no less than 15 Newton centimeters ('N-cm') (the 'Torque Specification'). Mechanically, this torque performance was to be maintained by a detent plunger and spring within the switch." Ex. 6 at ¶ 20.

8. GM's corporate designee testified that the Torque Specification applies throughout the life of a model vehicle. SJ Ex. 1 at 106:7-15 (Feb. 24, 2017 Antonucci Dep.).²

9. GM's corporate designee testified that Torque Specification refers to the torque as measured using the switch alone, and not as measured when the switch is in the ignition column (which GM sometimes refers to as a "system" measurement). SJ Ex. 2 at 58:25-59:11 (Feb. 9, 2017 B. Thompson Dep.; SJ Ex. 3 at 107:16-20, 128:4-15 (Feb. 23, 2017 B. Thompson Dep.); *see also* SJ Ex. 4 at 113:12-19, 187:7-14 (Mar. 31, 2017 M. Stevenson Dep.).

10. The Torque Specification does not specify or refer to an "average" torque requirement. SJ Ex. 5 (DLPH_MDL_0008615-650).

² All "SJ Ex. ___" references cited herein are to the Declaration of Steve W. Berman in Support of: (1) Plaintiffs' Statement of Undisputed Material Facts Pursuant to Local Rule 56.1 in Support of Plaintiffs' Opposition to GM's Motion for Summary Judgment Against the Bellwether Economic Loss Plaintiffs; and (2) Plaintiffs' Response to Defendant General Motors LLC's Statement of Undisputed Material Facts in Support of Its Motion for Summary Judgment (Dkt. Nos. 6071-6072), filed on September 21, 2018.

11. The same Torque Specification that governed the original Delta switch design continued to apply to the redesigned switch that incorporated the Catera plunger (see below). SJ Ex. 6 at 67:10-23 (Jan. 10, 2017 G. De Vos Dep.).

12. Delphi tested a pre-production switch in 2001 and early 2002, found that the Defective Switch [which was assigned part number 10392423 (the 423 switch)] did not meet the Torque Specification and told GM that it was “Not OK.” GM itself observed that the switch had “low detent plunger force.” Nonetheless, DeGiorgio, who was “tired of the switch from hell” and did not want to impact electrical performance or slow production, directed Delphi to “maintain present course” even though there was “still too soft of a detent.” So, the Defective Switch was installed in the 2003 Ion and the 2004 Cobalt. Ex. 6 at ¶¶ 21-23 (DPA, Ex. C SOF); *see also id.* at ¶ 5 (GM engineers knew the switch did not meet spec and was prone to movement out of Run, but approved production anyway).

13. “Almost immediately,” customers began reporting problems, while GM employees driving early production Ions and Cobalts also reported stalls, and some “were able to attribute the problem to the easy rotation of the key within the Defective Switch.” *Id.* at ¶¶ 24-27. “GM engineers working on the Pontiac Solstice, another new car equipped with the Defective Switch, learned of a complaint about a Solstice that had experienced the same inadvertent shutoff problem as had been reported in the Ion and the Cobalt.” *Id.* at ¶ 28.

14. “In November 2004, the Company opened the first of six engineering inquiries that would be initiated in the ensuing five years to consider ameliorative engineering changes for new cars being rolled off the production line. This first inquiry was closed ‘with no action’ in March 2005. Fixes such as improving the torque performance of the Defective Switch itself and changing the head of the associated key to reduce the likelihood of inadvertent movement from

Run to Accessory were rejected as not representing ‘an acceptable business case.’ . . . GM engineers concluded that each proposed solution would take too long to implement, would cost too much, and would not fully fix ‘the possibility of the key being turned (ignition turn off) during driving.’” *Id.* at ¶ 29. GM thus continued to sell vehicles equipped with the Defective Switch. *Id.* at ¶ 30.

15. Not all GM engineers agreed with the decision to do nothing. For example, the Vehicle Performance Manager for the Cobalt “believed that the Defective Switch presented a potential safety problem because it could cause sudden loss of power steering and power brakes,” and he “thought a remedy should have been implemented without regard to cost concerns. His views did not prevail.” *Id.* at ¶ 31.

16. In February 2005, Old GM released a “Preliminary Information” to dealers, explaining that the Defective Switch’s low torque could cause “Engine Stalls” and “Loss of Electrical Systems.” *Id.* at ¶¶ 32-35. GM’s Preliminary Investigation (PI) group, which was responsible for addressing problems with cars already on the road, began to study the low torque issue, but “the investigation essentially went nowhere.” *Id.* at ¶ 36.

17. GM “replaced the February 2005 Preliminary Information with a more formal ‘Service Bulletin’ to its dealers (the ‘2005 Service Bulletin’), alerting them to an ‘inadvertent turning off’ problem and instructing them to provide any complaining customers with inserts for their key heads that would transform the slot into a hole and thus reduce the lever arm. Unlike the Preliminary Information, which accurately described the condition caused by the Defective Switch as (among other things) a ‘stall,’ the 2005 Service Bulletin omitted that word. Thus, a dealer responding to a customer inquiry or complaint would not locate the bulletin if he or she only used the word ‘stall’ in the search.” *Id.* at ¶ 37.

18. “The omission of the word ‘stall’ from the 2005 Service Bulletin was deliberate. The PI Senior Manager . . . directed that the word be kept out of this bulletin even though he knew customers would naturally describe the problem as ‘stalling.’ The reason for the omission was to avoid attracting the attention of GM’s regulator, NHTSA. As it had happened, in the interim between the February 2005 Preliminary Information and the 2005 Service Bulletin, some within GM had been meeting with representatives of NHTSA to try to persuade them that defects causing vehicles to stall were not necessarily safety defects warranting recall action.” *Id.* at ¶ 38.

19. “As of the spring of 2006, the 2005 Service Bulletin was the lone measure in place to address the Defective Switch. There were no systematic efforts to provide key modifications for all owners of affected cars—or even all owners who came into dealerships for service.” And “new cars with the Defective Switch were being manufactured and sold to unwary customers.” *Id.* at ¶ 40.

2. GM secretly redesigned the Defective Switch in new models beginning with the 2007 model year.

20. “In April 2006, the Switch DRE [Design Research Engineer], who had received numerous complaints about the Defective Switch from other GM employees, authorized replacement of the Defective Switch in new cars with a different one that had a longer detent plunger and therefore significantly greater torque. The Switch DRE further directed, in contravention of accepted GM practice, that this change be implemented without a corresponding part number change. As a result, no one looking at the switch would be able, without taking it apart, to tell the difference between the old, Defective Switch and the new . . . One.” *Id.* at ¶ 41.

21. “Although it was effectuated without a part number change, the switch change that the Switch DRE approved in April 2006 was documented internally, and other engineers

were aware of it at the time and afterward.” *Id.* at ¶ 42. GM continued to utilize part number 10392423 for the switch.

22. The decision to redesign the switch without changing the part number was contrary to GM’s practice of changing the number of a part when a change is made to the part’s fit, form, or function. *See, e.g.*, Ex. 7 at 33-34 (Feb. 23, 2017 Thompson Dep.).

23. Moreover, the decision violated generally accepted engineering standards and practices relied upon by automotive engineers. Ex. 8 at 21 (Nov. 10, 2017 Stevick Report).

24. Old GM’s decision not to change the part number also violated generally accepted inventory management standards and practices, which dictate that a modification that is necessary to meet product safety specifications requires a part number change. *Id.*

25. These violations significantly delayed GM’s work in addressing the issue of inadvertent movement of the Delta Ignition Switch. *Id.* at 22.

26. Electrical changes not involving torque were made to the switch for model years beginning in 2008, and the part number was changed to 15886190 (the 190 switch). SJ Ex. 7 (DLPH_MDL_0002686-99).

27. In 2009, another change was made to alter the slot to a hole in the key head design, a change that had been previously rejected. “An engineer involved in the decision wrote at the time: ‘This issue has been around since man first lumbered out of [the] sea and stood on two feet.’” This “long-overdue change went into effect” for model year 2010 and later vehicles. Ex. 6 at ¶ 43 (DPA, Ex. C SOF).

3. The modified Delta switch with the Catera plunger was also defective, and GM knew it.

28. When GM expanded Recall No. 14v047 to include additional models commonly referred to as the “Service Part Vehicles” (2008-2010 MY Chevrolet Cobalt, 2008-2011 MY

Chevrolet HHR, 2008-2010 MY Pontiac Solstice, 2008-2010 MY Pontiac G5, and 2008-2010 MY Saturn Sky vehicles), GM said that non-Catera spring Delta switches with part number 10392423 may have been used to repair up to 2,664 of these vehicles, and that, accordingly, the recall would be expanded “[o]ut of an abundance of caution and to provide a replacement switch to all customers whose vehicles could have been impacted by the subject ignition switch” Ex. 5 at 9 (Apr. 11, 2014 14v047 Recall letter).

a. Torque testing revealed the defect, and GM was aware of moving stalls in vehicles with the redesigned Delta switch.

29. GM’s engineers have repeatedly stressed the importance of meeting GM’s torque specification. For example, GM engineer Gary Altman testified:

Q: And the vehicle never should have been sold if it didn’t meet GM’s minimum torque performance requirements, should it? . . .

A: That’s correct.

Q: And the reason is because that could be dangerous under certain situations because the key can move from run to accessory?

A: Yes.

Ex. 30 at 23:11-21 (Jun. 12, 2013 G. Altman Dep.) (GM’s Cobalt program engineer acknowledged that a vehicle never should have been sold if it didn’t meet GM’s minimum torque performance requirements because it could be dangerous); *see also* Ex. 31 at 23 (Apr. 29, 2017 Stevick Report).

30. The Delta ignition switch design change in 2006 included a new “Catera” detent plunger and spring intended to generate greater torque values in the ignition switch. Ex. 32 at 98 (Valukas Report).

31. GM knew that the Delta switch with the Catera plunger did not consistently meet the torque curve specification of 20 plus or minus 5 newton centimeters (for a range of 15-25 N-

cm), because Delphi's testing in October and November 2005 found that the modified switch did not comply with the target torque curve. Ex. 12 (DLPH_MDL_0002791-928); Ex. 13 at 71:2-73:22 (Nov. 4, 2015 T. Svoboda Dep.); Ex. 11 at 68:11-69:15 (Jan. 10, 2017 G. De Vos Dep.); Ex. 8 at 23 (Nov. 10, 2017 Stevick Report); *see also* Ex. 9 at 102:19-103:24 (Feb. 24, 2017 Antonucci Dep.); Ex. 10 (GM-MDL2543-003377211-59); Ex. 11 at 105:14-106:5 (Jan. 10, 2017 G. De Vos Dep.).

32. Delphi representatives confirmed to Congress that these test results “mean[t] that the ignition switches currently in use in 2008-2011 vehicles do not meet GM performance specifications.” Ex. 15 (GM-MDL2543-000658530); Ex. 16 at 45:24-47:8 (Jan. 11, 2017 Antonucci Dep.).

33. GM's corporate representative confirmed under oath that the Delta switches with the Catera plunger were indeed below target specification. Ex. 16 at 27:11-29:6; 32:16-33:22; 42:2-17; 51:24-52:16; and 63:2-16 (Jan. 11, 2017 Antonucci Dep.).

34. GM salvage yard testing in May 2012 showed that nearly half of the *post*-2007 MY Delta vehicles tested had below-specification torque. Ex. 17 (GM-MDL2543-001528463); Ex. 18 at Slide 4 (Jan 11, 2017 Antonucci Dep. Ex. 8, Tab 8) (note that the torque measurements presented in this data include the 15886190 switch with the Catera plunger used in relevant 2008-2011 models—*see also* at Ex. 16 at 58-60).

35. Testing conducted by GM litigation expert Michael Stevenson showed that 2008 and later model year switches did not meet the minimum 15 N-cm torque specification approximately 25% of the time. Ex. 19 at 25-30 (Mar. 31, 2017 M. Stevenson Dep.); Ex. 20 (excerpt from Stevenson Report).

36. Dr. Stevenson testified that, “[i]f I were presented with a circumstance where 10 to 20 percent . . . of a switch population was below specification, I would not accept that as a population. That’s unacceptable.” Ex. 19 at 60:3-6 (Mar. 31, 2017 M. Stevenson Dep.).

37. Dr. Stevenson also testified that the Torque Specification failure rate for the Delta switches with the Catera plunger “constitute[s] a . . . manufacturing defect within the switch[.]” SJ Ex. 4 at 43:18-44:12 (Mar. 31, 2017 M. Stevenson Dep.); *see also id.* at 92:21-23 (“Within the 190 switch population, that switch population for certain contains switches with defects, manufacturing defects.”).

38. Dr. Stevenson testified that independent of whether the Service Part Vehicles were serviced with part number 10392423, part number 15886190 switches “contain manufacturing defects. Absolutely.” *Id.* at 100:5-23; *see also id.* at 208:3-209:6 (again conceding that the 190 switch “contains a manufacturing defect”).

39. Plaintiffs’ testing is consistent with Stevenson’s results. Plaintiffs’ experts tested a sampling of both “old” Delta switches and “newer” Delta switches with the Catera plunger and found that about 95% of the 2006 and earlier Delta switches did not meet the 15 N-cm spec. Ex. 21 at 8 & n.25 (Jan. 24, 2017 Stevick Report); Ex. 8 at 2-5 (Nov. 10, 2017 Stevick Report).

40. Torque performance improved for post-2007 Delta switches containing the Catera plunger, but a significant percentage of these switches—25%—failed to meet the 15 N-cm torque minimum, and nearly 90% failed to meet the 20 N-cm design target. Ex. 8 at 6-9 (Nov. 10, 2017 Stevick Report).

41. In the transition year, 2007, more than 60% failed to meet the design minimum, and more than 90% of these switches failed to meet the design target. *Id.*

42. GM knew about reported incidents of moving stalls in Service Part Vehicles, as its consultants at the Virginia Tech Transport Institute (VTTI) uncovered evidence of inadvertent shutoff in post-2007 vehicles. Ex. 26 at -17708 (VTTI017690-713).

43. When VTTI reviewed NHTSA's consumer complaint database for knee-key incidents, it uncovered at least two such incidents involving Chevrolet HHRs, including one 2010 model. Ex. 27 at VTTI017535 (VTTI017535-536); *see also* Ex. 28 at -5069 (GM-MDL2543-300765061-336) ("The power steering goes out suddenly and has caused my wife to lose control of the car...."); Ex. 29 (GM-MDL2543-006786307-314) (GMinsidenews.com forum of customer complaints regarding loss of power steering while driving 2010 HHR).

44. GM's recall decision-making body, the Executive Field Action Decision Committee (EFADC) (Ex. 6 at ¶ 17 (DPA, Ex. C SOF), knew by December 2013 that the Catera-spring switches were failing the torque specification (Ex. 22 at 6, 8, 21-22 (MDL Ex. 599)); Ex. 23 (MDL Ex. 601)).

45. The EFADC also knew of reported incidents of moving stalls in Service Part Vehicles. Ex. 22 at 12-16 (MDL Ex. 599).

46. GM has admitted that such moving stalls/loss of power and control present a safety-related defect. Ex. 25 at 53:6-20, 305:3-8, 342:24-345:4 (Oct. 19, 2015 M. Barra Dep.).

b. In 2014, GM had to modify the production process in order to use the Delta switches as replacement parts in the 2014 recall repairs.

47. At the start of the recall process in 2014, Delphi expressed concern to GM about using the existing Delta ignition switch (part no. 15886190) as the 14v047 recall replacement part because its torque performance was below GM's specification. Ex. 11 at 118-122 (Jan. 20, 2017 G. De Vos Dep.).

48. Delphi's Glen De Vos testified that Delphi's CEO was "skeptical" that "simply replacing the part with the same part" would "actually correct the problem," which "prompted a lot of discussion about the performance of the existing part and a clear understanding of where its torque performance was, which was below the target specification." *Id.* at 118:12-22.

49. GM and Delphi discussed the failure rate of the Catera-spring switch from the 2005-2006 testing and sought a solution guaranteeing that the recall replacement parts met torque specifications. *Id.* at 110:14-111:2; Ex. 33 (GM-MDL2543-002120830-32); Ex. 34 (GM-MDL2543-002120833-39).

50. GM required a new Production Part Approval Process (PPAP) for the 2014 replacement parts and implemented a "higher torque curve" to ensure that all switches met the RUN to ACC torque specification. Ex. 11 at 109:21-110:2 (Jan. 20, 2017 G. De Vos Dep.); Exs. 35-39 (DLPH_MDL_0016500-503; DLPH_MDL_0016504-505; DLPH_MDL_0018025-28; DLPH_MDL_0018029-30; GM-MDL2543-000883074-77).

51. At GM's direction, Delphi made changes to apply a greater amount of compression to the spring, and made new efforts to ensure that the springs had a very tight distribution. Ex. 11 at 115:22-116:6 (Jan. 20, 2017 G. De Vos Dep.); Exs. 40-41 (DLPH_MDL_0032908-11; DLPH_MDL_0005674-76).

52. These changes raised the nominal torque resistance into the acceptable range. Ex. 11 at 116:13-17 (Jan. 20, 2017 G. De Vos Dep.).

53. In addition, and contrary to prior practice, torque checkpoints were significantly increased, and end-of-line testers were directed to throw out any switches that did not fully meet the 20 +/-5 n-cm specification. *Id.* at 97:11-98:3; 110:14-113:13; 111:16-112:10; *see also id.* at 105:18-25, 131-32.

54. GM changed the part number for the 2014 recall replacement switch. *Id.* at 11:1-2.

55. The part number for the 2014 recall replacement switch is 23215459. SJ Ex. 8 (GM-MDL2543-001666389).

56. GM's many manufacturing changes for switches used in recall repairs demonstrates the defectiveness of the Catera-spring switches previously installed in Service Part Vehicles. Ex. 8 at 25-26 (Nov. 10, 2017 Stevick Report); Ex. 211 at 7-8 (May 18, 2018 Stevick Report). The Service Part Vehicles are defective. Ex. 8 at 22-26 (Nov. 10, 2017 Stevick Report).

B. The 14v047 vehicles still have a knee-key defect due to the low placement of the switch on the steering column.

57. All cars sold with the Delta Ignition Switch Defect remain defective for the additional reason that the placement of the ignition switch has not changed and is still vulnerable to knee-to-key turn offs. Ex. 8 at 10-21, 28-32 (Nov. 10, 2017 Stevick Report); Ex. 211 at 33-38 (May 18, 2018 Stevick Report).

58. The ignition cylinder is placed in the lower section of the right side of the steering column of the vehicles using the Delta switch, placing the key and any items hanging from it close to the driver's right knee. Ex. 8 at 10 (Nov. 10, 2017 Stevick Report).

59. Over time, GM attributed inadvertent rotation to several causes, including switch placement (Ex. 42 at 89:24-90:4, 44:17-23, 71:1-5 (Nov. 4, 2015 B. Sullaj Dep.); Ex. 43 (GM-MDL2543-001722622-660)), knee contact (Ex. 42 at 76:3-7, 44:17-23, 71:1-5 (Nov. 4, 2015 B. Sullaj Dep.); Ex. 43 (GM-MDL2543-001722622-660)), the slotted head key design, weighty key chains (Ex. 45 (GM-MDL2543-400948484-485); Ex. 44 at 177:8-178:6 (Jun. 8, 2015 S. Oakley Dep.)), low torque, driver seat-positioning, and driver height (*id.*).

60. In early 2005, GM engineers proposed a change to the location of the ignition switch as a “sure solution,” but GM rejected this due to cost considerations. Ex. 32 at 67 (Valukas Report).

61. Switch DRE Raymond DeGiorgio testified that inadvertent key rotation “was related to the low placement of the lock housing in the column, the approximation of the key fob to the knee, driver’s knee, [and] the shape of the column shroud.” Ex. 46 at 74:9-75:9; 210:13-22 (Jun. 18, 2015 DeGiorgio Dep.); Ex. 32 at 62-63 (Valukas Report).

62. When DeGiorgio was asked in November 2004 about changes that could be made to solve the problem, he never responded. Instead, he prepared—but did not send—two draft e-mails. In one draft, DeGiorgio explained that he did “not have any quick/easy solution that will provide you the necessary Key/Cylinder retention forces during high-g maneuvers,” but identified “[t]he location of the Key/Cylinder (Low Mount) [a]s a major road block.” Ex. 32 at 62 (Valukas Report).

63. Internally, GM continued discussing the problematic location of the ignition switch. In October 7, 2012, Terrance Connolly said: “Jim Federico is in wait/see mode on this...wants to have all his alternatives scoped. He now has this elec fix scoped...and I think we understand implications of an insert into the head of the key to eliminate potential for a lever arm. Jim also specifically asked what we can do in the column (this was after we educated him on the detent/spring load being in the ignition switch). I think realistically, the only ‘fix’ we might participate in would be if we worked on some sort of a column knee shroud.” Ex. 48 (GM-MDL2543-000669266-268); Ex. 49 at 113:10-114:19 (Aug. 25, 2015 T. Connolly Dep.).

64. A slide presented on the Cobalt airbag non-deployment issue at a November 5, 2013 ISR meeting stated: “Root Cause: The hypothesis is that during the off road event the

driver's knee is interacting with the keys and /or the mass of the keys is causing the ignition to rotate." Ex. 50 (GM-MDL2543-000698643-670); Ex. 51 at 148:1-20 (Oct. 7, 2015 M. Foley-Gardner Dep.).

65. On December 12, 2013, John Murawa circulated a draft presentation noting a root cause of front airbag non-deployment as, "The driver's knee may be interacting with the keys (ignition cylinder location)." Ex. 52 (GM-MDL2543-001191398-403); Ex. 51 at 209:12-24 (Oct. 7, 2015 M. Foley-Gardner Dep.).

66. GM consultant VTTI provided a draft report to GM in 2014, concluding that because "the designed torque of the ignition switch had little impact on a driver's ability to manipulate key position with their knee," the problem was "[n]ot a low-torque issue" (Ex. 53 (VTTI017579-590); Ex. 26 at -17705 (VTTI017690-713)), and that several variables contribute to inadvertent key rotation, including knee-to-key interaction:

The ability of a driver to manipulate the ignition state of a vehicle with his/her knee during normal driving, thus moving the key from the "Run" to "Accessory" or "Off" position, is a safety-critical issue tied to many of the recalled GM vehicles. There are several variables that may interact, thus creating an opportunity for knee-key contact. These variables include: the layout of the driver's interior space, driver size, driving position, key angle in the "Run" position, and key size. Moreover, knee-key potential is not simply limited to the torque of the ignition switch itself. That is, the force produced by a driver's knee is generally high enough to overcome the torque required to move the key out of the 'Run' position. *The VTTI project team confirmed via firsthand experience that keys in the "Run" position can be easily manipulated by a driver's knee and moved to the "Accessory" or "Off" position even in cars equipped with ignition switches with a greater torque than the industry average (e.g., approximately 22 Ncm, per a discussion with GM engineers) if the aforementioned variables combine to create a potential knee-key interaction.* [Ex. 55 (GM-MDL2543-301432572); Ex. 54 at 121:2-123:7 (May 18, 2017 J. Fedullo Dep.).]

67. GM engineer Valarie Boatman endorsed VTTI's findings, agreed that knee-to-key contact can result in problems even when switches have high torque (Ex. 56 at 154:5-155:12; 156:15-157:9 (Apr. 25, 2017 V. Boatman Dep.)), and recognized that "some people may keep

the seat adjusted further forward than they normally would to accommodate room behind them.” *Id.* at 175:20-176:12; 177:12-19; *see also* Ex. 57 (GM-MDL2543-300906518-522).

68. VTTI also observed, “[T]he designed torque settings are easily overcome by force applied by a driver’s knee. Although low-torque ignition switches may be more susceptible to knee-key interactions, it is an issue that increased torque alone will not address.” (Ex. 27 VTTI017535-536).

69. When VTTI reviewed NHTSA’s consumer complaint database for knee-key incidents pertaining to GM vehicles, the search uncovered complaints associated with several Delta-platform vehicles, including complaints about Chevrolet HHRs. *Id.* at VTTI017535-36.

70. In addition, VTTI’s review of the SHRP2 NDS Database showed instances of “knee-key” inadvertent shutoff in post-2007 HHRs. Ex. 26 at -17708 (VTTI017690-713).

71. GM lawyers’ campaign to narrow the “root cause” of the defect and save money provides additional evidence that the 14v047 vehicles still have a knee-key defect. Exs. 58-64 (GM-MDL2543-001289207.001; GM-MDL2543-001250379.001-.004; GM-MDL2543-003414532; GM-MDL2543-001461599; GM-MDL2543-001461600; GM-MDL2543-001461613; GM-MDL2543-002699303).

72. Just before the recalls were announced in early 2014, GM decision-makers contemplated the scope of the recall and the implications of citing knee-key contact in the description of the defect. Investigator John Murawa concluded by mid-December that the “root cause” of frontal airbag non-deployment in 2005-07 Cobalts was a combination of factors, including “[t]he driver’s knee may be interacting with the keys (ignition cylinder location).” Ex. 65 (GM-MDL2543-001195479).

73. Murawa tied the root cause to the ignition switch, but ignition switch torque was just one of several factors in his root cause analysis presented at the December 17, 2013 EFADC meeting. Ex. 22 (MDL Ex. 599).

74. Murawa's recommended field action was to issue a safety recall, *id*, and Neil Skaar prepared a projected cost summary with proposals for two potential recall repairs. Ex. 66 (GM-MDL2543-002820972 and GM-MDL2543-001242735).

75. The summary explained the defective condition in part by reference to "the driver inadvertently bumping the key or the key chain" and recommended that dealers "replace the ignition switch, and install an insert to the vehicle keys to change the key ring from a slot to a centered key ring hole." *Id*.

76. GM's Greg Hall responded to Skaar by asking if he had sent this summary to the GM legal department yet "for their input." *Id*.

77. At the December 17, 2013 EFADC meeting, despite the fact that "Murawa thought the EFADC had all the information necessary to issue a recall," the committee demurred and directed Murawa to do additional "root cause" research. Ex. 32 at 218-19 (Valukas Report).

78. On January 29, 2014, GM attorney Bill Kemp asked to see Murawa's EFADC presentation materials. *See* Exs. 61-63 (GM-MDL2543-001461599; GM-MDL2543-001461600; GM-MDL2543-001461613). Murawa forwarded his drafts, which again included multiple factors—including knee-key contact—in the root cause analysis. Ex. 62 at 1 (GM-MDL2543-001461600).

79. The day before the EFADC meeting, Kemp circulated the draft presentation to other GM attorneys, including attorney Ronald Porter, who recognized that this was more than just a low torque issue, and that the issue spanned beyond the 2005-07 model years given that the

“Cobalt is not an outlier with respect to distance between the driver’s knee and the ignition switch.” Ex. 58 at 1 (GM-MDL2543-001289207.001).

80. GM attorneys—not engineers—dictated the exact wording to describe the defect and emphasized that knee-key contact or other factors should not be mentioned as part of the root cause. Ex. 59 at 1 (GM-MDL2543-001250379.001-.004) (Kemp directed Murawa to “see Ron’s legal advice regarding the phrasing for the root cause” and warned that “[t]his note should not be copied and/or distributed.”).

81. Simultaneously, in preparing for the impending recall, GM Technical Analyst Joy Hotchkiss forwarded to Murawa a draft recall notification letter to NHTSA, which described the cause of the defect as knee-key interaction and inertia-based inadvertent rotation and did not mention torque. Exs. 67-68 (GM-MDL2543-001289206; GM-MDL2543-001461672).

82. Because GM attorneys had directed Murawa not to describe the defect as being caused by knee-key contact or inertial factors “because those factors are present in post-07 Cobalts,” Ex. 58 at 1 (GM-MDL2543-001289207.001), Murawa told Hotchkiss that the letter needed “fine tuning” after the next day’s EFADC meeting because “the ‘driver interaction’ portion may be minimized.” Ex. 67 at 1 (GM-MDL2543-001289206).

83. The EFADC voted to issue a recall for 2005-07 Cobalts with a description of the root cause stating only that “ignition switch torque performance may be below specifications.” Ex. 64 (GM-MDL2543-002699303).

84. Murawa directed Neil Skaar to remove all mention of “knee-key” contact from the defect description in his recall summary, Ex. 60 at 1, which Mr. Skaar did. *See* Ex. 69 at 151:8-153:25 (May 20, 2015 N. Skaar Dep.).

85. Thus, GM chose to narrowly define its root cause language in an effort to limit the scope of the ignition switch recall. *See* Ex. 6 at ¶ 78 (DPA, Ex. C SOF).

86. The solutions that GM and other engineers considered over the years were designed to fix a problem much broader than low torque, as when they discussed the “sure solution” of changing the location of the ignition switch on the steering column to a higher mount. Ex. 32 at 67 (Valukas Report).

87. “Initial perceptions suggested that a dash-mounted ignition switch would, by location alone, be less susceptible to knee-key interactions.” Ex. 70 at -6540 (VTTI016388).

88. One engineer suggested that GM should move the location of the key input to the dash, as “[t]his design would then be directly in-line with the driver, as opposed to on a more perpendicular plane. Further design considerations may involve moving the key to the dashboard on the left side of the steering column.” Ex. 71 at -7055 (VTTI017046).

89. GM still advises customers to keep all items removed from their key chains even after getting a replacement switch that meets GM’s torque specification. Exs. 72-75 (GM-MDL2543-402101926; GM-MDL2543-30270346; GM-MDL2543-302703045; GM-MDL2543-006786450-54).

II. ALL VEHICLES SUBJECT TO RECALL 14V355 HAVE DEFECTIVE IGNITION SWITCHES

90. Recall No. 14v355 involved 3,141,731 of the following vehicles (approximately 850,000 of which were sold or leased as new after GM’s inception): 2005-2009 Buick Lacrosse, 2006-2011 Buick Lucerne, 2000-2005 Cadillac Deville, 2006-2011 Cadillac DTS, 2006-2014 Chevrolet Impala, 2006-2007 Chevrolet Monte Carlo, and 2014 Chevrolet Impala Limited. Ex. 76 (Jul. 2, 2014 14v355 Recall letter).

91. GM described the defect, cause, and effect as follows:

General Motors has decided that a defect which relates to motor vehicle safety exists in 2005-2009 model year (MY) Buick Lacrosse, 2006-2011 MY Buick Lucerne, 2000-2005 MY Cadillac Deville, 200[6]-2011 MY Cadillac DTS, 2006-2014 MY Chevrolet Impala and 2006-2007 MY Chevrolet Monte Carlo vehicles. If the key ring is carrying added weight and the vehicle goes off road or experiences some other jarring event, it may unintentionally move the key away from the “run” position. If this occurs, engine power, power steering and power braking will be affected, increasing the risk of a crash. The timing of the key movement out of the “run” position, relative to the activation of the sensing algorithm of the crash event, may result in the airbags not deploying, increasing the potential for occupant injury in certain kinds of crashes. . . . *Id.*

A. The switches in the vehicles subject to Recall No. 14v355 are defective because they have low torque.

92. In mid-2005, GM was preparing to launch two models on the “W” platform, the Impala and the Monte Carlo. *Id.* As part of the roll out of the 2006 Impala, GM provided early, saleable vehicles called “Captured Test Fleet” (CTF) vehicles to GM employees participating in the Product Evaluation Program (PEP). *Id.*

93. In August 2005, GM employee Laura Andres reported a potential safety issue with her 2006 Impala CTF, when it stalled after hitting a large bump. *Id.* Ms. Andres testified that “there was no power steering; there was no power to the vehicle at all, and a car driving behind me almost hit me, and they swerved out of the way to avoid me.” Ex. 77 at 22:13-23:1-8 (Dec. 3, 2015 L. Andres Dep.).

94. On August 24, 2005, Ms. Andres took the vehicle to the GM Service and Parts Operations at the GM Technical Center in Warren, Michigan and also reported the incident to GM through a specialized database for the Captured Test Fleet. *Id.* at 21:8-21, 25:22-27:3, 41:17-47:13; Ex. 78 (GM-MDL2543-400860846-51).

95. On August 30, 2005, GM engineer James Zito confirmed the problem: “I evaluated the ignition switch operation and found that I could get the switch to snap back from crank, back through the run detent. If this happens, a bump could cause the key to rotate back to

the accessory position and shut the engine off.” Ex. 77 at 41:17-47:13 (Dec. 3, 2015 L. Andres Dep.); Ex. 78 (GM-MDL2543-400860846-51).

96. Ms. Andres responded, copying DRE Raymond DeGiorgio: “The technician demonstrated for me what he thought might have happened, that the ignition detent might not have been completely forward, because there is no strong tactile feedback to know it is in position and the ‘pothole’ bump had the switch slip into off position. That looked like what I had experienced, because I did not bump the switch with my knee.” Ex. 77 at 59:23-60:6 (Dec. 3, 2015 L. Andres Dep.).

97. Ms. Andres further explained: “The technician said there is nothing they can do to repair it. He said it is just the design of the switch. He said other switches, like on the trucks, have a stronger detent and don’t experience this.” *Id.* at 60:6-14.

98. Ms. Andre also testified that, in 2005, she told others: “*I think this is a serious safety problem, especially if this switch is on multiple programs. I’m thinking big recall. I was driving 45 mph when I hit the pothole and the car shut off, and I had a car driving behind me that swerved around me. I don’t like to imagine a customer driving with their kids in the back seat, on I-75 and hitting a pothole, in rush hour traffic. I think you should seriously consider changing this part to a switch with a stronger detent.*” *Id.* at 60:15-25 (emphasis added).

99. Ms. Andres reiterated in her deposition testimony that she was of the clear view that this was a “serious safety problem” because she “could have been killed,” elaborating:

Well, when the vehicle stalls out, there’s no signals on the backlight, there’s no power, you have no control of the vehicle, and with a sudden stall like that, the vehicle behind you has no warning to be able to throw on brakes. They could have easily plowed right into me. . . . If you were traveling at a higher speed, you have shorter reaction time, and if that suddenly shut off and your vehicle just dies suddenly, you could be just hitting into the car. . . . Probably hitting more cars after that as well. . . . [*Id.* at 61:1-20, 62:6-21.]

100. And, in regard to the safety concern, when asked what she meant by writing “[e]specially if this switch is on multiple programs,” Ms. Andres explained that “if the switch demonstrated this behavior on this vehicle and it was on a number of product lines, it could potentially have that same problem across all those product lines.” *Id.*

101. After the Andres incident, GM engineer Jim Zito evaluated the switch operation “and found that I could get the switch to snap back from crank, back through the run detent. If this happens, a bump could cause the key to rotate back to the accessory position and shut the engine off. *I’ve noticed this on other GM vehicles that I get through the PEP program.*” Ex. 79 (emphasis added) (GM-MDL2543-100362151).

102. Old GM did not open a Problem Resolution Tracking System (PRTS) report in response to Ms. Andres’s concerns. Ex. 80 at 103:18-106:19 (Feb. 9, 2017 B. Thompson Dep.).

103. Neither Old GM nor GM investigated Ms. Andres’ concerns any further before 2014, *id.* at 105, 123, even though both Old GM and GM were aware of records in the Technical Assistance Center database in which the weight of the key chain was identified as a source of inadvertent turning of the ignition switch in the 14v355 vehicles. Ex. 81 at 212:5-221:4 (Mar. 16, 2017 J. Reiss Dep.); Exs. 82-84 (GM-MDL2543-103483847; GM-MDL2543-103518149; GM-MDL2543-103515613).

104. GM would ultimately conclude that the defect resulted in nine crashes, one fatality, and seven injuries. Ex. 86 at Slides 1, 3-5 (GM-MDL2543-100176340); Ex. 91 at Tab 2 (GM-MDL2543-301837946-8238); Ex. 80 at 159:22-169:22 (Feb. 9, 2017 B. Thompson Dep.).

105. Twenty-two vehicles in GM’s TREAD database “were concluded to have unintended key rotation.” Ex. 81 at 222:25-225:9 (Mar. 16, 2017 J. Reiss Dep.); Ex. 87 (GM-

MDL2543-301554330). 657 additional vehicles were reported to have stalled but did not have any formal report of ignition rotation in the database. *Id.*

106. In 2014, GM reviewed Ms. Andres' 2005 CTF report and directed Product Investigator Joseph Reiss to investigate. Ex. 76 (Jul. 2, 2014 14v355 Recall letter).

107. On June 11, 2014, Reiss proposed three remedies: (i) new key rings with replacement keys; (ii) new key rings with replacement key inserts; or (iii) "Redesign, validation, and replacement of ignition switch." Ex. 85 (GM-MDL2543-300733002); Ex. 81 at 101:1-102:1, 107:7-108:7 (Mar. 16, 2017 J. Reiss Dep.).

108. The affected vehicle population was 4,051,512, and replacing the switch would cost an estimated \$302,844,145.50. Ex. 85 (GM-MDL2543-300733002); Ex. 81 at 115:20-117:7 (Mar. 16, 2017 J. Reiss Dep.).

109. Reiss made a second presentation to SFADA on June 13, 2014, Ex. 86 (GM-MDL2543-100176340); Ex. 80 at 41:4-21 (Feb. 9, 2017 B. Thompson Dep.); Ex. 81 at 109:2-5 (Mar. 16, 2017 J. Reiss Dep.).

110. Reiss limited potential remedies to new key rings with either replacement keys or key inserts. Fixing the ignition switch itself was no longer a proposed remedy, Ex. 86 (GM-MDL2543-100176340); Ex. 80 at 41:4-44:10 (Feb. 9, 2017 B. Thompson Dep.); Ex. 81 at 145-48 (Mar. 16, 2017 J. Reiss Dep.), which decreased the estimated cost of the recall from \$302,844,145 to \$170,579,887. Ex. 86 (GM-MDL2543-100176340); Ex. 80 at 73:3-74:14, 81:7-82:7 (Feb. 9, 2017 B. Thompson Dep.).

111. Mr. Reiss made a third presentation to SFADA on June 15, 2014, after which SFADA ordered the recall. Reiss's final presentation further refined the total cost of the ring and

insert remedy to be about \$126 million. Ex. 87 (GM-MDL2543-301554330); *see also* Ex. 81 at 162:11-163:11 (Mar. 16, 2017 J. Reiss Dep.).

112. At the June 15 SFADA meeting, “cost/timing” were “worked urgently.” Ex. 88 at 300734616 (GM-MDL-2543-300734616); *see also* Ex. 81 at 144:13-145:14 (Mar. 16, 2017 J. Reiss Dep.).

113. Key inserts were chosen as the “obvious choice” “[c]ost-wise,” even though one engineer expressed concern that the inserts can fall out. Ex. 90 (GM-MDL2543-002827790); Ex. 69 at 118:25-119:19 (May 20, 2015 N. Skaar Dep.).

114. GM was “VERY concerned about the ‘cost’ associated with this particular field action, mainly because it involve[d] so many vehicles,” and GM personnel were “remind[ed]” that “we need to keep the costs of these inserts ‘very low.’” Ex. 92 (GM-MDL2543-000766203).

115. GM made the recall decision before the field tests on the vehicles affected by the recall were completed. Ex. 80 at 125:20-126:25 (Feb. 9, 2017 B. Thompson Dep.); Ex. 8 at 38 (Nov. 10, 2017 Stevick Report).

116. By not choosing to replace the switches in Recall No. 14v355 and instead replacing keys and rings, GM lowered the cost of the recall from approximately \$302 million to approximately \$126 million and saved approximately \$176 million.

B. The 14v355 vehicles still have a low-torque defect.

117. In 2014 “extensive” torque testing, GM found that the 14v355 vehicle switches performed below target specification. Ex. 76 (Jul. 2, 2014 14v355 Recall letter); Ex. 91 at Tab 2 (GM-MDL2543-301837946-8238); Ex. 86 (GM-MDL2543-100176340); Exs. 93-94 (GM-MDL2543-300733121; GM-MDL2543-200119564); Ex. 80 at 55:5-60:20 (Feb. 9, 2017 B.

Thompson Dep.); Ex. 81 at 124:13-126:16, 127:14-128:17, 165:10-168:11 (Mar. 16, 2017 J. Reiss Dep.).

118. The target torque specification from RUN to ACC for these switches was 20 N-cm. Ex. 86 (GM-MDL2543-100176340); Ex. 81 at 180:6-18 (Mar. 16, 2017 J. Reiss Dep.).

119. Many of the test runs showed switch torque well below 15 N-cm, with several readings as low as 10 N-cm. Exs. 95-96 (GMMDL2543-300737004; GM-MDL2543-300740982); Ex. 81 at 183:21-189:12 and 173:8-180:18 (Mar. 16, 2017 J. Reiss Dep.).

120. Joe Reiss said that “[a]ll test runs for all off-the-shelf switches came in below 12.2Ncm,” the switches did not meet the torque target even when considering “the verbal target tolerance of +/- 5Ncm (which is not included in the documents for these switches),” and testing “field parts from various sources (junk yard, GM vehicles, customers that made complaints against the product, purchased vehicles to test) . . . proved a majority of the switches did not meet the torque test.” Ex. 81 at 187:7-188:21 (Mar. 16, 2017 J. Reiss Dep.).

121. Reiss advised that GM should ensure that Dalian Alps manufactured the replacement switches so that the torque specification was met; if not, GM would be allowing Alps “to deliver parts that do not meet the spec.” Ex. 97 (GM-MDL2543-402054564); Ex. 81 at 190:2-194:15 (Mar. 16, 2017 J. Reiss Dep.).

122. Plaintiffs’ experts in their own testing also found that all three relevant switch models implicated by Recall No. 14v355 (which have the same housing and mechanics) failed GM’s minimum torque specification of 15 N-cm. Ex. 8 at 32-38, 39 (Nov. 10, 2017 Stevick Report).

123. GM's testing, including testing conducted by Joe Fedullo, demonstrates that increasing switch torque increases the ignition rotation resistance and robustness against unintended key rotation. Ex. 211 at 9-11 (May 18, 2018 Stevick Report).

124. Moreover, relying on consumers to change keys and rings and follow GM's instructions to never weight the key is not an effective remedy given that, as GM's own consultants at VTTI have found, only 20-25% of consumers will comply, Ex. 8 at 59, and relying on consumers to communicate the importance of the rings to other drivers is unreasonable, Ex. 211 at 6. Reliance upon changing user behavior is at the bottom of the "Safety Hierarchy," which maintains that controlling user behavior is the least effective method of mitigating risk. *Id.*

125. Customer complaints to NHTSA demonstrate that some vehicles with the recall "remedy" continue to have dangerous problems such as moving stalls. *Id.* at 40.

126. Because GM did not replace the switches in the vehicles subject to Recall No. 14v355 with switches that had sufficient torque, GM has not cured the defect. *Id.* at 39.

C. The 14v355 vehicles still have a knee-key defect.

127. The 14v355 vehicles also remain defective because the key insert and ring changes do not eliminate the potential for knee-to-key interaction. *Id.*; *see also supra* ¶¶ 57-89.

128. In an early version of a Safety Field Investigation report, Mr. Reiss described the technical root cause as "Driver interaction with the key or weight of items on key ring," a description that he testified was supported by the customer complaint TREAD data that he had reviewed. Ex. 81 at 66:23-67:8, 83:11-84:2 (Mar. 16, 2017 J. Reiss Dep.).

129. Reiss later removed that language from the root cause description, an omission that he admitted was not supported by data or testing. *Id.* at 70:16-76:18.

III. ALL VEHICLES SUBJECT TO RECALL 14V394 HAVE DEFECTIVE IGNITION SWITCHES

130. Recall No. 14v394 recalled 554,328 of the following vehicles: 2003-2014 Cadillac CTS and 2004-2006 Cadillac SRX, including approximately 116,000 sold or leased as new after GM's inception. Ex. 111 (Jul. 16, 2014 Ltr. from Brian LaTouf to Nancy Lewis).

131. GM described the defect, cause, and effect as follows:

General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2003-2014 MY Cadillac CTS and 2004-2006 MY Cadillac SRX vehicles. If the key ring is carrying added weight and the vehicle goes off road or experiences some other jarring event, or if the driver unintentionally bumps the key ring or items attached to the key ring with their knee, the key may unintentionally move away from the 'run' position. If this occurs, engine power, power steering and power braking may be affected, increasing the risk of a crash. The timing of the key movement out of the 'run' position, relative to the activation of the sensing algorithm of the crash event, may result in the airbags not deploying, increasing the potential for occupant injury in certain kinds of crashes. Customers should remove all items from their key rings, including the key fob, leaving only the ignition key. In addition it is very important that drivers adjust their seat and steering column to allow clearance between their knee and the ignition key. [*Id.*]

A. The switches in the vehicles subject to Recall No. 14v394 are defective because they have low-torque.

132. The Cadillac CTS was first introduced in 2003 with a Catera ignition switch (P/N 12450257) that was developed in 1999, around the same time that the Delta switch (P/N 12450250) was developed. Ex. 112 at 13:16-25, 17:18-20:11, 21:6-10 (Mar. 9, 2017 B. Thompson Dep.); Exs. 113-14 (DLPH_MDL_0042329-32; DLPH_MDL_0042063-66).

133. Delphi engineer Eric Mattson explained that the Delta ignition switch was "extremely similar" to the Catera switch installed in 2003-07 Cadillac CTS and 2004-2006 Cadillac SRX vehicles included in Recall 14v394 (as well as the Epsilon ignition switch installed in the Recall 14v400 vehicles). Ex. 115 at 130:24-132:4 (Aug. 20, 2015 E. Mattson Dep.); *see also* Ex. 113 at 0042331 (DLPH_MDL_0042329-32) ("Catera ignition switch is identical to the Delta Ignition switch except the PCB, Lock-Cylinder Interface, and the Actuator shaft are

different.”); Ex. 116 (GM-MDL2543-300349481) (GM engineers, including Ray DeGiorgio and Bill Skelton, discussing inadvertent ignition switch rotation occurring in vehicles later recalled under NHTSA Recall 14V394 and noting that this was a “[c]orp common switch” installed across many platforms and “other cars . . . do have the same condition out in the field”).

134. The primary difference between the Catera and Delta switches was in the plunger design. The Catera was engineered and built with a supposedly stronger detent plunger (Delphi P/N 741-79378) than the Delta switch had (Delphi P/N 741-75316). Ex. 117 (GM-MDL2543-004271616).

135. This stronger detent plunger is the same one that Ray DeGiorgio secretly used to replace the Delta plunger in mid-2006, as detailed above. *See also* Ex. 32 at 98 (Valukas Report).

136. In discussing the similarities between the two switches, Delphi engineer Eric Mattson stated that the “Delta is essentially a feature enhancement of the CTS. You take a CTS Catera switch and you add features to it to end up with a Delta switch. . . . [T]he overall package, the outside first surface that would be referred to for mating to the -- the assembly in the vehicle is all extremely similar, if not -- if in some cases not identical” Ex. 115 at 130:24-132:4 (Aug. 20, 2015 E. Mattson Dep.); *see also* Ex. 113 (DLPH_MDL_0042329-32).

137. Pre-production testing on a 12450257 switch sample revealed a RUN-ACC torque of 14.4 N-cm. Ex. 114 (DLPH_MDL_0042063-66); Ex. 112 at 20:24-24:11 (Mar. 9, 2017 B. Thompson Dep.).

138. The torque specification for this switch was 20 N-cm plus or minus 5 N-cm. Ex. 112 at 20:24-24:11 (Mar. 9, 2017 B. Thompson Dep.).

139. The Cadillac CTS and the Cadillac SRX used the same ignition switch through the 2006 model year. *Id.* at 14:16-23.

140. In 2006, the Catera switch was redesigned for the Cadillac SRX only (the MY07 CTS retained the old Catera switch design). Ex. 111 (7/16/14 LaTouf letter to Nancy Lewis); Ex. 112 at 98:14-108:18 (Mar. 9, 2017 B. Thompson Dep.).

141. While there were minor detent differences between the SRX redesign and the original design, Ex. 118 (GM-MDL2543-301526010-18); Ex. 112 at 98:14-108:18 (Mar. 9, 2017 B. Thompson Dep.), the plunger and spring were the same as in the first iteration of the Catera switch, and the plunger and spring had the same Delphi part number, 741-79378, even though there were visual differences between the two parts. *Id.* at 301526016.

142. For MY08, GM introduced the “Generation 2” Cadillac CTS, which contained an ignition switch assembly designed by Dalian Alps Electronics Company (GM P/N 92184907). Ex. 111 (Jul. 16, 2014 LaTouf letter to Nancy Lewis).

143. In November 2007, GM issued Engineering Work Order (EWO) DHGCY to implement a smaller key ring for the Cadillac vehicle line in an effort to “reduce the driver interference seen while driving when the key FOB hits the driver’s knees.” Ex. 119 at 100369796 (GM-MDL2543-100369796-885).

144. The change was to begin with the 2008 model year vehicles, but it was not implemented until February 2010 in order to save money. Ex. 120 at 36:1-19 (May 7, 2015 M. Beauregard Dep.).

145. In January 2010, GM issued another EWO (DYKMHB) to change the key head opening on the Cadillac CTS key from a slot to a hole. Ex. 111 (July 16, 2014 LaTouf letter to Nancy Lewis); *see also* Ex. 112 at 29-32 (Mar. 9, 2017 B. Thompson Dep.).

146. The January 2010 EWO states that the change was made to prevent accidental ignition shut off for customers with heavy key chains. *Id.* The new key design was introduced in December 2010 and was used in Cadillac CTS vehicles from December 2010 through 2014 MY. *Id.*

147. GM was again made aware of a problem with the CTS switch in 2011 when a GM employee assigned a 2012 MY CTS that “employed a key designed with a hole rather than a slot, reported a potential safety issue through the GM Company Vehicle Evaluation Program (CVEP) reporting system. The employee reported that contact between the key fob and his knee had resulted in an unintentional switching off of the ignition. The issue was reviewed by the CTS Current Product Improvement Team (CPIT),” which took no action. Ex. 111 (July 16, 2014 LaTouf letter to Nancy Lewis).

148. In October 2011, GM received reports that the 2012 CTS was susceptible to knee-key interaction. *Id.* at 2.

149. GM engineer Gregory Cockerill described in 2011 how he attempted to “purposely recreate the condition” in his CTS and that he “was able, relatively easily, to turn the engine off on about a half dozen occasions” with his knee. Ex. 121 (GM-MDL2543-003203478-80); Ex. 120 at 48:2-14, 52:5-14 (May 7, 2015 M. Beauregard Dep.).

150. There is no evidence that GM took action. *See* Ex. 121 at 003203478 (GM-MDL2543-003203478-80).

151. In April 2012, GM learned that another 2012 CTS experienced stalls. Ex. 122 (GM-MDL-2543-401964941-56); Ex. 112 at 33:24-48:19 (Mar. 9, 2017 B. Thompson Dep.). A GM employee was able to demonstrate that the key inadvertently moved out of RUN when his

knee hit the key. Ex. 111 (July 16, 2014 LaTouf letter to Nancy Lewis); Ex. 112 at 85:23-86:15 (Mar. 9, 2017 B. Thompson Dep.).

152. Red X team member Amber Hendricks Googled “moving stalls, what can cause,” opened a Current Production Problem Resolution Tracking System (PRTS) report, and recommended that replacement keys be provided to every customer. Ex. 122 at 401964950 (GM-MDL-2543-401964941-56).

153. During her investigation, Hendricks received feedback from the Cadillac CTS Program Warranty Engineer and Brand Quality Manager indicating that the moving stalls were likely caused by the driver’s knee bumping the key, and that this was a “known issue.” *Id.* at - 4942.

154. Ultimately, the Red X investigation was closed. Ex. 112 at 69:11-70:18, 72:4-73:5 (Mar. 9, 2017 B. Thompson Dep.).

B. The 14v394 vehicles still have a low-torque defect.

155. The defect in the vehicles subject to Recall 14v394 was caused by a low-torque ignition switch that was susceptible to unexpected rotation. Ex. 8 at 44-46 (Nov. 10, 2017 Stevick Report).

156. Nonetheless, GM did not replace the ignition switches in the Recall No. 14v394 vehicles. Ex. 111 (July 16, 2014 LaTouf letter to Nancy Lewis); Ex. 123 (GM-MDL2543-301819091-106); Ex. 112 at 128:14-129:1 (Mar. 9, 2017 B. Thompson Dep.).

157. Instead, GM instructed dealers to provide two key rings and a key insert. *Id.*

158. This recall “repair” did not replace the switch, nor fix the single-point-of-failure problem, and therefore did not cure the defect. Ex. 8 at 47 (Nov. 10, 2017 Stevick Report).

159. GM’s own internal analysis concluded that the recall did not eliminate the possibility of inadvertent rotation. *Id.*

160. The switches in the models subject to the 14v394 recall suffered from low torque. Testing done in June 2014 (two days before the SFADA presentation for this defect) showed that the average torque on a 2007 CTS was 15.5 N-Cm with a standard deviation of .6 and a significant number of tests resulting in below-spec torque. Ex. 124 at 100176631 (GM-MDL2543-100176631.01-.19).

161. In August 2014, as part of a comparison of the original Catera switch with the SRX-redesigned switch, GM engineers tested five samples and measured torque from RUN to ACC between 11.8 N-Cm and 14.9 N-Cm, below the torque specification. Ex. 118 at 301526011 (GM-MDL2543-301526010-18); *see also* Ex. 112 at 98:14-108:18 (Mar. 9, 2017 B. Thompson Dep.).

162. June 23, 2014 testing showed that, in a MY07 Cadillac CTS with a slotted key, the key inadvertently turned from RUN to ACC in multiple dynamic tests, and with as little as .4 lbs of keys. Ex. 124 at 100176631 (GM-MDL2543-100176631.01-.19). A column meant to contain data for measurements with a hole (as opposed to a slot) contained no data. *Id.*

163. Measurements from a first-generation SRX with the same switch showed similar rotation. *Id.*

164. Minutes from the June 25, 2015 SFADA meeting show that the Generation 1 CTS and SRX did “not pass vehicle level engineering force testing (inertia events) targets,” and while the Generation 2 CTS passed the vehicle-level engineering force test, “data shows we have knee contact ability to rotate the key out of run position.” Ex. 111 at 301554717; *see also* Ex. 112 at 74:9-21 (Mar. 9, 2017 B. Thompson Dep.).

165. GM's testing, including testing conducted by Joe Fedullo, demonstrates that increasing switch torque increases the ignition rotation resistance and robustness against unintended key rotation. Ex. 211 at 9-11 (May 18, 2018 Stevick Report).

166. Relying on consumers to change keys and rings and follow GM's instructions to never weight the key is not an effective remedy given that, as GM's own consultants at VTTI found only 20-25% of consumers will comply, *id.* at 59, and relying on consumers to communicate the importance of the rings to other drivers is unreasonable, *id.* at 6. Reliance upon changing user behavior is at the bottom of the Safety Hierarchy, which maintains that controlling user behavior is the least effective method of mitigating risk. *Id.*

C. The 14v394 vehicles still have a knee-key defect.

167. As detailed above, GM knew that its vehicles suffered from knee-to-key defects, in addition to low torque defects. *See supra* ¶¶ 57-89.

168. June 23, 2014 results of a knee-to-key read-across relating to the Cobalt recall suggested that a 5% female driving a 2008 CTS could turn the key in a normal driving position. Ex. 124 at 100176631 (GM-MDL2543-100176631.01-.19).

169. A review of customer complaints data confirmed that inadvertent turning occurred on the higher-torque Alps ignition switch just as often. Ex. 111 at 400294540; *see also* Ex. 112 at 87:4-88:6 (Mar. 9, 2017 B. Thompson Dep.).

170. A review of Not-In-Suit Matters (NISM's) found five injuries connected to inadvertent turning in the Generation 2 Cadillac CTS, even though testing showed that the switch had adequate torque to hold the key in the detent. *Id.* GM attributed four crashes and five injuries to the defect. *Id.*; *see also* Ex. 111 at GM-MDL2543-400294523.

171. In 2014, after GM had purportedly enhanced its system for reviewing safety defects, *see, e.g.*, Ex. 25 at 352:23-356:20 (Oct. 19, 2015 M. Barra Dep.), Valarie Boatman

considered fudging knee-key test results for the vehicles covered by the 14v394 recall. Ex. 125 (GM-MDL2543-300738149-77); Ex. 56 at 123:2-125:16, 129-30 (Apr. 25, 2017 V. Boatman Dep.).

172. Testing showed that Cadillac CTS vehicles with keys with a hole and a single key ring between key and fob were potentially subject to inadvertent key rotation when the driver's knee came into contact with the key. Ex. 111 (July 16, 2014 LaTouf to Nancy Lewis letter).

173. Dr. Stevick opines that the recall repair is ineffective to correct all inadvertent rotation incidents due to knee-to-key contact. Ex. 8 at 47 (Nov. 10, 2017 Stevick Report).

IV. ALL VEHICLES SUBJECT TO RECALL 14V400 HAVE DEFECTIVE IGNITION SWITCHES

174. This recall involved 6,729,742 vehicles, all of which were made by Old GM. Ex. 198 at 304846175.

175. The recall covers mid-sized sedans with dash-mounted ignition switches that were supplied by Stoneridge Pollak and released by Ray DeGiorgio. Stoneridge was the supplier of the "N-car" switch used in the Malibu, Alero, and Grand Am and switch for the Impala and Monte Carlo models (known as the W-car vehicles) and the Grand Prix. Ex. 7 at 41-43 (Feb. 23, 2017 B. Thompson Dep.).

176. The models included in Recall 14v400 are: 2000-05 Chevy Impala, 2000-05 Chevy Monte Carlo, 1997-03 Chevy Malibu, 2004-05 Chevy Malibu Classic, 1999-04 Olds Alero, 1998-02 Olds Intrigue, 1999-05 Pontiac Grand Am, and 2004-08 Pontiac Grand Prix. Ex. 198 at 304846175 (Thompson Dep. Exs.).

177. GM described the defect internally as follows: "The ignition switch may inadvertently move out of the 'run' position if the key ring is carrying added weight and the vehicle goes off road or experiences some other jarring event." GM's technical root cause

description: “The ignition switch torque performance may be below target curve. The system torque performance may be insufficient to resist energy generated from weight hanging on slotted key.” And GM’s description of the “effect of the condition:” “If the key ring is carrying added weight and the vehicle goes off road or experiences some other jarring event, it may unintentionally move the key away from the ‘run’ position. If this occurs, engine power, power steering and power braking will be affected increasing the risk of a crash. The timing of the key movement out of the ‘run’ position, relative to the activation of the sensing algorithm of the crash event, may result in the airbags not deploying, increasing the potential for occupant injury in certain kinds of crashes.” Ex. 198 at Tab 2 at 1 (Thompson Dep. Exs.); *see also* Ex. 7 at 100-01 (Feb. 23, 2017 B. Thompson Dep.).

178. The sole “remedy” under the recall was to eliminate the slot in the key head and add two key rings.

A. The switches in the vehicles subject to Recall No. 14v400 are defective because they have low-torque.

179. In 2003, GM learned of a customer complaint of intermittent vehicle shutoffs in a MY 2003 Grand Am from a Michigan dealership. Ex. 206 (GM-MDL2543-304846175-179). Despite multiple attempts, the dealership could not duplicate the condition.

180. GM Manager Ray Romeo visited the dealership and observed the problem (*id.*):

[S]he hit two speed bumps at about 30 miles an hour. . . . [A]nd on the second bump the car did turn off. It restarted right away, but that was the beginning of what we saw in the ignition switch. The weight of the keys and the abruptness of the speed bump basically pulled the keys down past the detent. [Ex. 199 at 20:20-21:17 (Oct. 23, 2015 R. Romeo Dep.).]

181. Romeo also found that the switch was susceptible to “snap back,” a condition where the ignition lock spring works with the weight of the key chain to return the key to ACC rather than RUN after the key is released from start. *Id.*

182. Romeo noted that GM tested other vehicles with similar dash-mounted switches, “and determined that the same complaint potential exists,” and then found the “snap back” condition could “possibly creat[e] a customer complaint of start and stall.” Ex. 200 (GM-MDL2543-300349468-70); Ex. 7 at 76:23-78:5 (Feb. 23, 2017 B. Thompson Dep.).

183. In January 2003, GM opened PRTS 0084/2003. Ex. 200 (GM-MDL2543-300349468-70); Ex. 201 (GM-MDL2534-300349404-37); Ex. 199 at 17:23-19:24 (Oct. 23, 2015 R. Romeo Dep.); Ex. 198 at Tab 7 (Thompson Dep. Exs.); Ex. 7 at 61:17-64:3, 70:18-72:14, 77:15-78:5 (Feb. 23, 2017 B. Thompson Dep.).

184. On May 22, 2003, GM sent a voice mail to dealerships describing the condition and identifying the relevant population of vehicles as 1999-2003 MY Chevy Malibu, Oldsmobile Alero, and Pontiac Grand Am. Ex. 206 (GM-MDL2543-304846175-179). The voice mail explained in part:

This voicemail provides information about a condition that may be driving no trouble found claims on customer vehicles We were able to capture a customer’s vehicle for the complaint of intermittent vehicle shuts off while driving. At times this vehicle would start up and then shut off for no apparent reason. Sometimes no codes would set and sometimes multiple codes would set. In both instances the vehicle would immediately restart. The customer had brought the vehicle in to the dealership four times. On the first three trips the condition could not be duplicated. On the fourth trip back the dealership service manager noticed the customer’s excess size key ring and mass. The condition was duplicated using the customer’s full key ring, which was not left at the dealership on prior visits. The actual cause of this customer’s condition was that over bumps the mass and weight of the customer’s key ring forces the dash mounted key lock cylinder switch out of its switch detent and allows the key to rotate back one sixteenth of an inch from the on position towards the accessory position. This amount of key movement will shut the vehicle off and create this customer’s complaint. Also, when the vehicle is started and the key is quickly released between the ignition lock spring and weight and mass of the key chain, the key can snap back just past the on position detent and allow the engine to shut off. Noting the size of the customer’s key ring, replacing the ignition lock cylinder with another one of the same would not have corrected this issue. Additionally, when the ignition is turned off in this type of manner, depending on which module is communicating on the data line at the time, is dependent on whether or not DTC codes will set and which codes will set. . . . As we investigated this condition further we also found that it was not uncommon for customers to have a

number of items attached to their key rings. In many instances, especially when the vehicle was in for service overnight, the customer usually left only the vehicle key and key fob. Large key rings with multiple items attached can also be responsible for customer complaints of the vehicle shuts off while shifting into park on column mounted ignition lock cylinders. This is caused when the customer is shifting from a drive gear upward into park and an item on the key ring hits the ignition lock cylinder key tabs on the way up and moves the switch back out of the on detent position. Please be aware that these conditions can be caused by excessive key size and mass from the customer's key ring, and attention to this detail should be paid to allow you to better and more properly diagnose the customer's complaint. . . . [Ex. 202 (GM-MDL2543-301842728); Ex. 7 at 67:21-74:23 (Feb. 23, 2017 B. Thompson Dep.).]

185. By June 2003, Lansing Car Assembly Plant engineer Raymond Foster told Ray DeGiorgio, Rob Ezze, and Engineering Group Manager Bill Skelton that the “issue is now late” and that Lansing “will be taking heat for this one.” Ex. 203 (GM-MDL2543-300349461-62); Ex. 199 at 73:11-75:14 (Oct. 23, 2015 R. Romeo Dep.); Ex. 7 at 86:4-91:17 (Feb. 23, 2017 B. Thompson Dep.).

186. Mr. Foster also advised DeGiorgio that there were two potential solutions—a second detent or a different spring. Ex. 203 (GM-MDL2543-300349461-62); Ex. 199 at 73:11-75:14 (Oct. 23, 2015 R. Romeo Dep.); Ex. 7 at 86:4-91:17 (Feb. 23, 2017 B. Thompson Dep.).

187. DeGiorgio told Foster that the switch was a “common part” across many platforms. Ex. 203 (GM-MDL2543-300349461-62).

188. Rob Ezze replied that the other vehicles with the “[c]orp common switch” were evaluated in the field and found to have the “same condition.” *Id.*

189. PRTS 0084/2003 described a production remedy to “[i]ncrease detent plunger force on the ignitions Switch. Increase RUN detent to 15 Ncm; (Housing detent change; spring force increase).” Exs. 200-201 (GM-MDL2543-300349468-70; GM-MDL2543-300349404-37), 213 (GM-MDL2543-300349438-51); Ex. 199 at 17:23-19:24 (Oct. 23, 2015 R. Romeo Dep.); Ex. 198 at Tab 7 (Thompson Dep. Exs.); Ex. 7 at 61:17-64:3, 70:18-72:14, 77:15-78:5 (Feb. 23, 2017 B. Thompson Dep.).

190. On July 24, 2003, EWO 211722 was initiated to increase the detent plunger force on the ignition switch, replacing P/N 22688239 with P/N 22737173. Ex. 198 at Tab 9 (Thompson Dep. Exs.); *see also* Ex. 7 at 31:6-34:3 (Feb. 23, 2017 B. Thompson Dep.).

191. Brian Thompson testified that the part number was changed because it was GM's practice to change the part number when there was a change to the fit, form, or function of the part. Changing the plunger spring within the switch constituted a change in fit, form, or function. Ex. 7 at 31:6-34:3 (Feb. 23, 2017 B. Thompson Dep.).

192. On October 9, 2003, Ray Romeo explained that "[w]e recommended a higher spring rate from day one." Ex. 204 (GM-MDL2543-300349484); Ex. 7 at 97:16-100:1 (Feb. 23, 2017 B. Thompson Dep.).

193. Another engineer said that he "had no interest in funding the Piece cost/Tooling that would be required to modify housing to improve detents." Ex. 205 (GM-MDL2543-300349499); Ex. 7 at 91:22-94:4 (Feb. 23, 2017 B. Thompson Dep.). Nonetheless, this change was implemented in 2004 for newly produced Malibus, Grand Ams, and the Alero.

194. On March 17, 2004, EWO 317693 was initiated to increase the detent plunger force on the ignition switch in the Grand Prix in order to "maintain commonality" between the Grand Prix and the Malibu, Grand Am, and Alero. Ex. 198 at Tab 10 (Thompson Dep. Exs.); Ex. 7 at 40:21-42:16 (Feb. 23, 2017 B. Thompson Dep.).

195. This was a production change, and none of the old defective switches were recalled and replaced. Ray DeGiorgio, the DRE for the switch, was the initiator of the EWO used to change the ignition switch. Ex. 7 at 45:17-46:20 (Feb. 23, 2017 B. Thompson Dep.).

196. An Engineering Group Manager approved the design change "w/o part number change." Ex. 198 at Tab 2 at 49 (Thompson Dep. Exs.); *see also* Ex. 198 at Tab 10, at 1

(Thompson Dep. Exs.); Ex. 206 (GM-MDL2543-304846175-179) (P/N 10310896 remained the part number for the new ignition switch). This was inconsistent with GM practice. Ex. 7 at 48:20-49:17 (Feb. 23, 2017 B. Thompson Dep.).

197. The service stock disposition was designated “use,” allowing the old switch to be used in repairs. Ex. 206 (GM-MDL2543-304846175-179); *see also* Ex. 7 at 34:5-35:7 (Feb. 23, 2017 B. Thompson Dep.).

198. As a result of this EWO, GM changed the torque specification on these switches from 10 to 19 N-cm to 13 to 22 N-cm. *Id.* at 58:2-60:2.

199. At least one engineer was “not totally convinced” that the stiffer plunger “eliminated the problem.” Ex. 207 (GM-MDL2543-300349478); Ex. 7 at 81:20-85:3 (Feb. 23, 2017 B. Thompson Dep.).

200. The SFADA Presentation, Slide 1, reports 102 “vehicles were concluded to have the key rotated unintentionally,” and 2,968 vehicles “were determined to be potentially relevant to the condition” based on the TREAD data. VOQs reported 21 incidents that “were concluded to have the key rotated unintentionally; 262 potentially relevant to the condition; 68 reports in 2014.” Ex. 198 at Tab 2, at 8-10 (GM-MDL2543-304857221-23) (Feb. 23, 2017 B. Thompson Dep. Exs.). GM concluded that three crashes, two injuries, and three fatalities resulted from the defect. *Id.* at Tab 2, at 1 (GM-MDL2543-304857214).

201. Field accident data show three crashes, two injuries, and three fatalities. *Id.* at Tab 2, at 1.

202. There is no evidence that Old GM or GM took any further action on any of these vehicles, including the 2003 Grand Am, until the 2014 recall. Ex. 7 at 35:8-36:3 (Feb. 23, 2017 B. Thompson Dep.).

203. GM investigated switches in the N-platform vehicles, 1999-2004 Oldsmobile Alero, 1999-2005 Pontiac Grand Am, 1997-1999 Oldsmobile Cutlass, 1997-2003 Chevrolet Malibu, and 2004-2005 Chevrolet Classic, in May 2014 when NHTSA forwarded a 2003 Service Bulletin for inadvertent turning in the 1999-2003 MY Malibu, Alero, and Grand Am. Based on the results of this report, some W-platform vehicles, such as the 2005 Impala, were added to Valerie Boatman's Milford Proving Grounds testing. Tests concluded that these vehicles were susceptible to inadvertent switch turning. *Id.*; Ex. 206 (GM-MDL2543-304846175-179).

B. The 14v400 vehicles still have a low-torque defect.

204. GM did not replace the ignition switches in the 14v400 vehicles in connection with the 14v400 recall. Ex. 206 (GM-MDL2543-304846175-179); Ex. 219 (GM-MDL2543-301809189-96). Instead, GM told dealers to provide two key rings and a key cover. *Id.*

205. Yet tests conducted in 2014 demonstrated both switch torque and system torque well below 15 N-cm for certain Malibu, Grand Am, Alero, Impala, Monte Carlo, Grand Prix, and Intrigue models. Ex. 198 at Tab 2 at 7, 13, 22, 31, 58 (Thompson Dep. Exs.); *see also* Ex. 7 at 122:1-128:9 (Feb. 23, 2017 B. Thompson Dep.).

206. GM did not discuss the results of these switch tests with NHTSA. Ex. 7 at 129:13-22 (Feb. 23, 2017 B. Thompson Dep.).

207. In June of 2014, Alan Adler was contacted by an owner of a 2005 Impala with ignition switch problems. Ex. 208 (GM-MDL2543-100703375-84). The vehicle has a dash-mounted ignition switch (as opposed to the column-mounted switch in Delta vehicles). *Id.*

208. Alder forwarded this email to the testing team—Valerie Boatman, Joe Fedullo, and Joe Reiss. *Id.* Boatman commented that N-platform dash-mounted switches had been tested at Milford Proving Grounds, and that those cars failed the dynamic tests. *Id.*

209. Reiss, in referring to the 2005 Impala, observed that “it looks as though all these vehicles were way below system performance target of 20Ncm. Correct?” Boatman responded: “Correct. They also didn’t pass road inertial testing at 0.7 lb – they didn’t pass until the weight was dropped to 0.4 lb.” Ex. 209 (GM-MDL2543-100703325); Ex. 56 at 181:17-184:8 (Apr. 25, 2017 V. Boatman Dep.); Ex. 210 (GM-MDL2543-300735833-36).

210. Plaintiffs’ experts have tested switches bearing three different part numbers associated with Recall No. 14v400: 22670487, 22737173, and 10310896. All switches tested failed GM’s minimum torque specification of 15 N-cm—a 100% failure rate. Ex. 8 at 57-59 (Nov. 10, 2017 Stevick Report). The switches tested were new, original GM parts purchased from wholesalers and have not been subject to degradation through normal use over time. *Id.*

211. The ignition switches for all models recalled in Recall No. 14v400 should have been replaced with switches meeting the torque specification. *Id.*

212. GM acknowledged that the “root cause” of the defect was poor ignition switch torque. *Id.* at 52-57.

213. GM’s “repair” does not fix that problem (nor fix the single-point-of-failure problem), and subsequent testing confirms that the switch continues to have deficient torque, based on GM’s own specifications. *Id.* at 57-59.

214. GM’s testing, including testing conducted by Joe Fedullo, demonstrates that increasing switch torque increases the ignition rotation resistance and robustness against unintended key rotation. Ex. 211 at 9-11 (May 18, 2018 Stevick Report).

215. Relying on consumers to change keys and rings and follow GM’s instructions to never weight the key is not an effective remedy given that, as GM’s own consultants at VTTI found only 20-25% of consumers will comply, *id.* at 59, that relying on consumers to

communicate the importance of the rings to other drivers is unreasonable, *id.* at 6. Reliance upon changing user behavior is at the bottom of the Safety Hierarchy, which maintains that controlling user behavior is the least effective method of mitigating risk. *Id.*

**V. ALL VEHICLES SUBJECT TO RECALL 14V346 HAVE A
KNEE-TO-KEY DEFECT**

216. Recall No. 14v346 recalled 464,712 model year 2010-2014 Chevrolet Camaros (all of which were sold or leased as new after GM's inception). GM described the defect, cause, and effect as follows:

General Motors has decided that a defect which relates to motor vehicle safety exists in all 2010-2014 model year Chevrolet Camaro vehicles. There is a risk, under certain conditions, that some drivers may bump the ignition key with their knee and unintentionally move the key away from the 'run' position. If this occurs, engine power, and power braking will be affected and power steering may be affected, increasing the risk of a crash. The timing of the key movement out of the 'run' position, relative to the activation of the sensing algorithm of the crash event, may result in the airbags not deploying, increasing the potential for occupant injury in certain kinds of crashes. Until the recall has been performed, it is very important that drivers adjust their seat and steering column to allow clearance between their knee and the ignition key. [Ex. 103 (emphasis in original) (GM-MDL2543-402373524-526).]

217. From January 2010 and through 2014, NHTSA received numerous complaints of moving stalls in 2010-2014 Camaros. Ex. 8 at 48-49 (Nov. 10, 2017 Stevick Report) (NHTSA ID Nos. 10328659, 10361456, 10450423, 10661553, 10523065, 10535407, 10477427, 10546543, 10548084, 10583760, 10585700, 10586895, 10630339, 10592329, 10592714); Ex. 99 at ¶¶ 268-82 (*Orange County Complaint*).

218. One complainant driving a 2014 Camaro said: "... my car just shut down. The car went totally blank and shut down in the middle of the turn on this very busy main thoroughfare." *Id.* at ¶ 277.

219. Another complainant described several instances in which his Camaro's power failed while driving on the highway at 70 mph and wondered, "Will I have a head[-]on collision

while trying to pass another car?” Ex. 8 at 48-49 (Nov. 10, 2017 Stevick Report); Ex. 99 at ¶ 268 (*Orange County Complaint*).

220. GM acknowledged eight Vehicle Owner Questionnaires (VOQs), three lawsuits, and 14 field reports related to this defect. Ex. 8 at 48-49 (Nov. 10, 2017 Stevick Report); Ex. 98 at Tab 11 at 1; Ex. 100 at 400396110 (GM-MDL2543-400396110-31); *see also* Ex. 101 at 64-69 (Mar. 22, 2017 A. Melocchi Dep.). GM concluded that three crashes, four injuries, and no fatalities resulted from the defect. Ex. 98 at Tab 11 at 1.

221. In December 2012, a customer sent an e-mail to Mary Barra and other GM executives reporting a 2010 Camaro stall on the highway and asking “IS MY NEW CAR A COFFIN?” Ex. 102 (GM-MDL2543-402113400-401). GM took no action in response.

222. On June 12, 2014, GM decided to issue Recall No. 14v346 for 2010-2014 MY Chevrolet Camaro vehicles (Ex. 103 (GM-MDL2543-402373524-526)) but did not replace the ignition switches. Instead, GM told dealers to “remove the key blade from the original flip key/RKE transmitter assemblies provided with the vehicle, and provide two new keys and two key rings per key.” *Id.*

223. The recall did not eliminate the defect; the vehicles still have a knee-to-key defect because of the low location of the switch on the steering column. Ex. 8 at 50 (Nov. 10, 2017 Stevick Report).

224. Before GM’s decision to recall the Camaro, Valarie Boatman tested the key with drivers of different heights and recommended turning the run position 54 degrees counter clockwise (CCW). Exs. 104-107 (GM-MDL2543-100702516-533; GM-MDL2543-402052787-89; GM-MDL2543-300897782-810; GM-MDL2543-301823052-061); Ex. 56 at 130:12-133:5 (Apr. 25, 2017 V. Boatman Dep.).

225. This adjustment averts knee-key contact problems by putting the key in a position that is much less likely to be hit by the driver's knee. GM considered this solution at two separate OIR meetings in June (it would have taken 16 weeks to obtain the part). Ex. 100 (GM-MDL2543-400396110-31); Ex. 101 at 28:9-29:12 (Mar. 22, 2017 A. Melocchi Dep.); Ex. 98 at Tab 11 at 1 (Melocchi Dep. Exs.).

226. Testing conducted over 13 days in May 2014 showed that rotating the ignition cylinder position 54 degrees CCW made it "difficult" for drivers to turn off the ignition while moving their knees forward, and "not possible" to turn off the ignition using an upward motion with their knees. Ex. 98 at page 14 (Melocchi Dep. Exs.); *see also* Ex. 101 at 47:11-53:8 (Mar. 22, 2017 A. Melocchi Dep.).

227. GM did not implement Boatman's recommendation, Ex. 104, instead choosing to remove the key blade from the fob and attach it to a ring. GM made this modification after testing just five subjects on the afternoon of June 11. Ex. 101 at 94:5-105:11 (Mar. 22, 2017 A. Melocchi Dep.); Ex. 98 at Tab 19 (Melocchi Dep. Exs.).

228. Boatman's June 19 "Camaro Ignition Studies" slide deck labelled the key change as a "[t]emporary solution." Ex. 106 (GM-MDL2543-300897782-810); Ex. 101 at 107-110 (Mar. 22, 2017 A. Melocchi Dep.).

229. This temporary measure did not eliminate the risk of inadvertent switch rotation. Ex. 8 at 51 (Nov. 10, 2017 Stevick Report).

230. Boatman's testing shows that the key change alone still resulted in a "medium" risk that knee-key contact would still occur for drivers in the fifth, fiftieth, and 99 percentile. Ex. 106 at 300897785 (GM-MDL2543-300897782-810); *see also* Ex. 108 (300736014-024); Ex. 109 at 100708506 (GM-MDL2543-100708495-512).

231. The remedy also ignores testing from February 2014 showing low torque values. Ex. 110 (GM-MDL2543-001173490-494); *see also* Ex. 101 at 136:17-141:24, 168:13-174:3 (Mar. 22, 2017 A. Melocchi Dep.); Ex. 98 at Tab 16 (Melocchi Dep. Exs.); Ex. 98 at Tab 17 (Melocchi Dep. Exs.).

232. Any knee contact with the key should turn the key towards, rather than away from, the RUN position. Ex. 8 at 50 (Nov. 10, 2017 Stevick Report).

233. As detailed above, GM knew that its vehicles suffered from knee-to-key defects, in addition to low torque defects. *See supra* ¶¶ 57-89.

VI. ALL VEHICLES WITH IGNITION SWITCH DEFECTS ALSO SUFFER FROM A SINGLE-POINT-OF-FAILURE DEFECT

234. When the ignition switch transitions from RUN to ACC, it results in the loss of engine power and can result in a moving stall. Other safety systems power down, including the seat belt pretensioners, airbags, power steering, power brakes, and electronic stability control. Loss of these vehicle control and safety systems is a serious safety issue. Ex. 126 at 10-37 (Nov. 10, 2017 Loudon Report).

235. “[T]he too-easy movement of the Defective Switch from the Run to the Accessory or Off position resulted in an unexpected shutoff of the engine and . . . a ‘loss of electrical system[s],’” including power steering, power brakes, and the sensing diagnostic module or “SDM,” which controlled airbag deployment. Indeed, “[i]nternal GM documents reflect that . . . certain employees within GM understood no later than 2001 the natural connection between a loss of electrical systems and non-deployment of airbags: if the ignition switch turned to Off or Accessory, the SDM would ‘drop,’ and the airbags would therefore be disabled. If a crash then ensued, neither the driver nor any passengers could have the protection of an airbag.” Ex. 6 at ¶ 44 (DPA, Ex. C SOF).

236. “[T]he deadly effects of the Defective Switch on airbag non-deployment began manifesting themselves early on, in crashes about which GM was made aware contemporaneously” in July 2004, November 2004, June 2005, July 2005, October 2006, and April 2007. In one crash, the police officer noted that the ignition switch “appeared to have been in the accessory position . . . preventing the airbags from deploying.” Similarly, “[a]n April 2007 report about the same crash . . . likewise posited that the airbags had failed to deploy because the key was in the Accessory position. This report even specifically referenced the October 2006 version of the 2005 Service Bulletin, which described the Defective Switch.” *Id.* at ¶¶ 45-49.

237. In the spring of 2007, NHTSA expressed concern to GM about a high number of airbag non-deployment complaints in Cobalts and Ions, leading GM to task an “Airbag FPA Engineer” to track reports of airbag non-deployments in Cobalt crashes. In May 2007, the PI group even placed the issue of Cobalt airbag non-deployment into the first stage of GM’s recall process, but the group did not follow-up. *Id.* at ¶ 50.

238. Drivers continued to die or be injured in crashes in September 2008, April 2009, and December 2009, often where the airbags failed to deploy and where there was evidence that the ignition switch was in Accessory at the time of the crash. *Id.* at ¶¶ 51-55.

239. Moving the ignition switch from the RUN position to the ACC or OFF positions sends a signal to the car’s Body Control Module, which then turns off the power supply to the Sensing Diagnostic Module (SDM), which powers the vehicle’s safety systems such as airbags. This means that the ignition switch is a “single point of failure”: If the ignition switch fails, the vehicle’s safety systems—including the airbags—power off. There is no backup system or built-in redundancy to power the airbags in the event of an ignition switch malfunction. Ex. 8 at 9-10, 27, 60-61 (Nov. 10, 2017 Stevick Report); Ex. 126 at 8-33 (Nov. 10, 2017 Loudon Report).

240. Engineers “are supposed to avoid single points of failure in safety systems so that safety devices will be available in the event of a failure somewhere else in the system. The airbag system is an important safety system, and it should not have a single point of failure; it should always be active if the car is moving at high speeds—especially given that GM knew the ignition switches were troublesome.” Ex. 8 at 60-61 (Nov. 10, 2017 Stevick Report).

241. In other words, “safety-critical systems are considered safe only if they can withstand the occurrence of any single point failure.” Ex. 126 at 56 (Nov. 10, 2017 Loudon Report).

242. The ignition-switch recalls at issue in this case did not address this single point of failure. So, the cars remain defective even after recall. Ex. 8 at 60-61 (Nov. 10, 2017 Stevick Report).

243. In Dr. Stevick’s opinion, power should have been supplied to the SDM for a longer time period after ignition switch power-off in order to be available during a crash scenario, or the Ion SDM should have been connected directly to the battery and either software logic or an additional hardware circuit should have been implemented to ensure airbag deployment if the vehicle was still moving. Ex. 8 at 73-75; SJ Ex. 9 at 26-50 (July 29, 2015 Stevick Report); SJ Ex. 10 at 62:10-64:4, 100:2-22, 130:25-135:18 (Sept. 28, 2015 Stevick Dep.).

244. Dr. Stevick designed, built, and tested a simple hardware circuit that sends power to the SDM if the vehicle is moving more than 15 mph. SJ Ex. 10 at 13:4-19:24 (Sept. 28, 2015 Stevick Dep.).

245. Mr. Loudon opines that GM should have designed the SDM to remain active and allow the airbags to deploy where the ignition switch moved out of RUN.

Because of the significant safety implications, sound engineering principles require that reasonable efforts should have been made to expand the operating envelope of the SDMs in the GM Vehicles to accommodate the conditions caused by the loss of ignition. Adding software to the SDM designed to extend the operating time of the device after the ignition switch is turned off is feasible and the safest course of action in combination with design changes to the ignition switch to reduce the probability of the switch accidentally being turned off.

Ex. 126 at 4 (Nov. 10, 2017 Loudon Report).

246. Alternative designs were available to GM to ensure that safety systems remained active in the event the ignition switch moved out of RUN (“airbag prolongation”). GM could have implemented a simple circuit that supplied power to the SDM when the vehicle was moving at certain minimum speed, *id.*, a design solution posited by GM’s technical consultants at VTTI (*see* Ex. 127 (VTTI001115); *see also* Ex. 128 at 300742832 (VTTI final report suggesting modification to the SDM to ensure that the airbag system stays active at about 5 mph) (GM-MDL2543-300742664-880)) and used by competitors such as Toyota (Ex. 8 at 60 (Nov. 10, 2017 Stevick Report); Ex. 211 at 28-29 (May 18, 2018 Stevick Report)).

247. Software existed that GM considered installing to allow the SDM and airbags to deploy even if the ignition switch transitioned from RUN to ACC or OFF. Ex. 126 at 35-50 (Nov. 10, 2017 Loudon Report).

248. GM indeed considered alternative designs. In 2012, GM repeatedly discussed the benefits of SDM prolongation and developed software to install on GM vehicles in order to mitigate the dangers posed by the ignition switch defect. GM discussed internally how SDM software could be changed so that the airbags could deploy for a period of time after the ignition switch moved from RUN to ACC. SJ Ex. 11 (GM-MDL2543-000673219-225); SJ Exs. 12 (GM-MDL2543-003853956-959), 13 (GM-MDL2543-002134382).

249. In an October 7, 2012 email, Terrance Connolly wrote: “Don’t think either of you guys were a part of the call on this topic last Thursday. Electrical reported out on ability to put an electronic fix in place that would cause airbag to stay active for five seconds if ignition went to the accessory position. Basic answer is yes, they can do it but becomes expensive field fix. Needs a controller.” Ex. 48 (GM-MDL2543-000669266-68); Ex. 49 at 113:10-114:19 (Aug. 25, 2015 Connolly Dep.).

250. GM recognized that it would be expensive to install in existing vehicles because replacing hardware may be necessary given that there was not enough ROM space left on the SDMs. *See* SJ Exs. 14 (GM-MDL2543-000851826-841), 15 (GM-MDL2543-004241860-861), 16 (GM-MDL2543-402048593-604); 17 (GM-MDL2543-003501412-414), 18 (GM-MDL2543-002375439-503).

251. During a Field Performance Evaluation Team (FPET) meeting on December 19, 2013, GM considered the design solution of keeping the SDM active for a longer period of time after the ignition switch inadvertently rotated out of the “RUN” position, but GM again declined to do so for cost reasons. Ex. 129 at 002222242 (*e.g.*, SDMs with previously stored EDR records would have to be replaced (25% of total population)) (GM-MDL2543-002222230-90).

252. In 2014, GM engineers again considered a prolongation alternative in which the vehicle’s crash sensing and airbag deployment capability would remain available “[f]or the duration of prolongation delay timer on transition from IGN ON to OFF / ACCY [and/or f]or the duration of active crash event, as determined by event threshold, if the event was initiated during prolongation delay timer.” Ex. 130 (GM-MDL2543-001138706-37); Ex. 131 at 129:22-132:9 (Vipul Modi Dep.).

253. In fact, GM engineers were now proposing a design that was actually in line with the rest of the industry. Ex. 132 at 003122271 (GM-MDL2543-003122245-76); Ex. 126 at 35-50 (Nov. 10, 2017 Loudon Report).

254. GM engineers and lawyers continued to discuss SDM prolongation, *see* SJ Ex. 19 (GM-MDL2543-003575716-720), but ultimately opted for a mechanical fix instead of a software change. SJ Exs. 18 (GM-MDL2543-002375439-503), 20 (GM-MDL2543-002139814-815).

255. GM has applied for a patent on technology that enables airbag deployment even if the ignition switch is in ACC or OFF while the vehicle is in motion, *see* SJ Ex. 21 at 15 (Nov. 13, 2015 Stevick Report), and GM is now taking steps to implement SDM prolongation in new vehicles. *See* SJ Ex. Ex. 22 (GM-MDL2543-400955824); SJ Ex. 23 at 53:1-54:5 (Jul. 21, 2015 J. Capp Dep.); *see also* Ex. 130; SJ Ex. 24 at 38:22-40:13, 34:11-16, 86:14-93:9, 96:10-97:14, 94:11-95:6, 101:20-103:2, 104:13-18, 109:4-13, 110:15-111:16, 131:22-132:9, 155:5-7 (Jun. 1, 2015 V. Modi Dep.); SJ Ex. 25 at 21:19-27:17 (Nov. 5, 2015 E. Buddrius Dep.).

256. But, to this day, GM has not remedied the single-point-of-failure defect.

VII. PLAINTIFFS WERE DAMAGED

A. Safety is a materially important factor to consumers generally, and Plaintiffs specifically, in considering the purchase or lease of a GM vehicle.

257. After emerging from the bankruptcy of Old GM, GM proclaimed that it was a new company and that its products would “improve safety.” Ex. 188 (GM Annual Report excerpt).

258. GM also touted its new “culture,” in which it was “pushing accountability deeper into the organization and demanding results from everyone” and stressed that it was “committed to . . . safety.” *Id.* at 16.

259. GM understood that safety was important to consumers:

According to GM research, safety ranks among the top 10 reasons for purchase. According to 2012 calendar year sales data, 54 percent of Chevrolet, Cadillac, GMC and Buick buyers surveyed listed safety features as an “extremely important” purchase consideration. The same percentage of buyers industrywide also listed safety features as “extremely important.”

“We design safety and crashworthiness into our vehicles very early in development,” said Gay Kent, GM’s general director of Vehicle Safety and Crashworthiness. “We are committed to offering advanced safety technologies on a broad range of models, not just on the most expensive vehicles. All of our vehicles are designed to provide continuous protection for customers before, during and after a crash.” [Ex. 189 (GM press release).]

260. GM’s 2009 Form 10-K Annual Report stated: “Product recalls can harm our reputation and cause us to lose customers, particularly if those recalls cause consumers to question the safety or reliability of our products.” Ex. 190 at 31 (10k excerpts).

261. GM’s 2013 Annual Report also underscored safety: “Nothing is more important than the safety of our customers.” Ex. 191 (GM annual report excerpt).

262. At a May 2014 conference, Gay Kent, director of GM global vehicle safety, proclaimed: “The safety of all our customers is our utmost concern.” Ex. 192 (press release).

263. In 2006, Bob Lange, Old GM’s Executive Director, Vehicle Structure and Safety Integration, said: “It is easy to see how automotive safety is growing in prominence. Customers tell us safety is a price of entry today the way vehicle quality was a few years ago.” Ex. 193 (GM-MDL2543-401904307).

264. A recent driver safety public opinion poll conducted by the National Safety Council found that: (i) 83% of consumers were concerned about potential injury or death while driving; (ii) 95% said they would consider new safety features nice-to-have (58%) or must-have (37%) when buying their next car; (iii) 83% understand when and how to use new safety features in vehicles; and (iv) 78% trust the safety systems in their vehicle to respond correctly when

needed. Ex. 194 (National Safety Council Driver Safety Public Opinion Poll); Ex. 195 at 4 (Nov. 10, 2017 Goldberg Report).

265. *Consumer Reports* surveys from 2013 and 2014 also demonstrate the importance of safety to consumers. Each study collected data from over 1,500 respondents, who were asked to select their top three priorities from among seven attributes (quality, safety, value, performance, design style, technology/innovation, and environmentally friendly/green). Safety was selected by 88% of the respondents. Exs. 196-97 (Consumer Reports, 2013 and 2014 Car Brand Perception Surveys); Ex. 195 at 3 (Nov. 10, 2017 Goldberg Report).

266. Each of the Plaintiffs testified that safety was a materially important factor in their purchase or lease of their GM vehicle and that they would not have acquired the vehicle or would have paid less if they had known about the defects. *See* Exs. 552-78 (Plaintiff deposition transcripts).³

267. Examples of this testimony include:

Q. Okay. And how much do you claim you overpaid?

A. I hadn't even thought about it up until this case came up. But considering if I had known about the defect, I would never have purchased the car in the first place, I'd say a hundred percent. [Ex. 555 at 166:1-6 (Patricia Barker).]

Q. Would you have bought your car if at the time of purchase GM told you the car had a safety defect that could potentially injure or kill you?

³ Ex. 552 at 74:8-14, 79:13-17, 209:21-212:20; Ex. 553 at 169:20-171:24; Ex. 554 at 179:15-18, 180:3-183:4; Ex. 555 at 166:1-6, 266:12-270:1; Ex. 556 at 129:16-132:3; Ex. 557 at 178:25-181:25; Ex. 558 at 81:11-14, 99:22-100:6, 101:13-102:4; Ex. 559 at 150:19-21, 170:24-171:17; Ex. 560 at 51:5-15, 116:7-118:7; Ex. 561 at 33:9-16, 34:3-9, 124:14-127:6; Ex. 562 at 56:19-25, 63:10-19; Ex. 563 at 89:11-90:2, 90:23-91:2, 124:14-19, 161:4-164:3; Ex. 564 at 86:19-87:13, 267:25-268:5, 279:6-282:1; Ex. 565 at 111:7-114:18; Ex. 566 at 55:3-18, 160:18-161:13; Ex. 567 at 47:20-49:20, 53:16-20, 94:13-25; Ex. 568 at 176:16-178:25; Ex. 569 at 56:6-11, 64:19-21, 74:1-13, 84:2-12, 183:1-4, 197:20-198:13; Ex. 570 at 40:9-14, 97:16-23, 98:9-19, 100:5-13; Ex. 571 at 54:3-9, 60:2, 61:11-18, 65:11-19, 89:14-19, 215:9-216:2, 222:10-225:20; Ex. 572 at 38:15-24, 138:22-140:20; Ex. 573 at 31:12-32:10, 156:11-160:11; Ex. 574 at 83:18-84:4, 86:9-24, 88:4-13, 90:17-91:3, 162:6-163:16, 163:25-164:17, 180:22-181:15, 189:23-195:9; Ex. 575 at 133:4-134:10; Ex. 576 at 71:18-22, 136:24-137:2, 157:19-158:3, 163:12-165:12; Ex. 577 at 140:12-141:23; Ex. 578 at 66:21-67:12, 156:8-163:13. *See also infra* at ¶¶ 352-53, 357-58, 360, 366, 369, 374, 377, 388, 392, 399, 402, 407-08, 411, 415, 418, 421, 424, 429, 431, 436, 439, 444, 447-49, 454, 457, 468, 471-72, 475, 480-81, 484, 488, 491-92, 496, 499, 503, 506-07, 511, 514-17, 524, 527, 532, 535-36, 542, 545, 550, 553, 559, 562, 556-67.

A. No. [*Id.* at 266:12-15.]

Q. Is a safe car worth more to you than a car with a hidden safety defect?

A. A safe car is worth more to me, yes. [Ex. 558 at 100:4-6 (Sylvia Benton).]

Q. [S]uing somebody is a serious thing, right, so why—the defect never manifested itself for you, you weren't—nothing happened, GM replaced the ignition switch free of charge, gave you a rental car free of charge. So why is it that you decided to sue GM?

A. I was angry. I was angry, feeling that, you know, I bought a car and it was—it was defective, there was a defect. And if I had known in advance I would never—I would not have bought this car. I would not, because I wouldn't have felt safe. [Ex. 567 at 47:20-48:8 (Winifred Matos).]

Q. Was safety one of your concerns when you were picking out a vehicle to buy for your daughter?

A. Yes, yes. [Ex. 569 at 56:9-11 (Santiago Orosco).]

A. I just remember that I wanted a car that was affordable, and that was safe. I had two small children, and I trusted in them to go ahead and bring that out to me. [Ex. 571 at 61:15-18 (Esperanza Ramirez).]

Q. Is a safe car worth more to you than a car with a hidden safety defect?

A. A safe car is worth more. [Ex. 569 at 197:20-22 (Santiago Orosco).]

Q. Would you have bought a car from GM if at the time of purchase GM told you the car had a safety defect that could kill or injure you?

A. I'd run away from that car. [*Id.* at 197:23-198:1.]

268. Plaintiffs' advertising expert Professor Marvin Goldberg has testified that safety is a major consideration for consumers, Ex. 195 at 3-4 (Nov. 10, 2017 Goldberg Report); Ex. 221 at 2-4, 33-35 (May 23, 2018 Goldberg Report), and that GM—consistently one of the largest advertisers in the United States—responded by advertising its products with implicit or explicit safety messages. Ex. 195 at 5-6, Appendix C (Nov. 10, 2017 Goldberg Report); Ex. 220 (t.v. commercial transcripts); Ex. 221 at 2-12, 33-37, 41-44 (May 23, 2018 Goldberg Report).

269. GM put core safety messages into its brand-wide and vehicle-specific advertisements. Ex. 195 at 5-6, 9-14, App. C (Nov. 10, 2017 Goldberg Report); Ex. 220 (t.v. commercial transcripts); Exs. 222-548 (more than 300 GM print, radio, television, and e-mail advertisements during the relevant time period that contain messages regarding safety) (the GM Safety Advertisements).

270. The safety messages reached the intended audiences, including Class Members. *See, e.g.*, Ex. 549-51 (ad placements); Ex. 221 at 5-6 (May 23, 2018 Goldberg Report).

271. GM expert Brad Cornell testified that recalls can have an impact on the price of a manufacturer's vehicles (SJ Ex. 48 at 115:17-22, 51:9-19 (Apr. 13, 2018 Cornell Dep.):

Q. Do you remember testifying earlier that the reasons you didn't include other GM cars that weren't subject to recalls at all was because their prices might be depressed from some sort of stigma effect?

A. I -- I worried about that possibility, yes.

* * *

Q. Okay. Are there other circumstances where the disclosure of a defect could adversely affect the market price of affected vehicles?

A. Well, there might be some sort of stigma attached, that the consumers would just say "Jeez, I don't want to be . . . "I don't want to be owning a vehicle where the manufacture did this sort of thing." So a stigma could leave a -- an impact on the price after the announcement of the recall.

GM expert Dominique Hanssens testified that damaging information can harm a brand (SJ Ex. 49 at 73:5-10 (Apr. 30, 2018 Hanssens Dep.):

Q. -- do you agree with that statement, that the better you are known as a brand, the more that any damaging information can really do harm, and that this is particularly true in the automotive sector because of the inherent safety issues?

A. Yes.

B. Plaintiffs have suffered consequential damages in the form of lost time spent obtaining recall repairs.

272. Plaintiffs have suffered consequential damages in the form of the time and expense of taking the vehicles to GM dealerships for the relevant recall repairs. Plaintiffs had to expend time and resources obtaining recall repairs, including time spent scheduling an appointment; driving to the dealership (in some instances multiple times); meeting with the dealer's service writer to discuss the repair; arranging and engaging in transportation if the vehicle is left at the dealership during the repair or spending time waiting at the dealership during the repair; and driving the vehicle back home or to work after the recall was performed. Ex. 218 at pp. 6-7 (Feb. 2018 Manuel Report).

273. GM's documents concede that the repair time for the ignition defect is approximately 90 minutes and that customers may need to leave their vehicle at the dealership even longer than 90 minutes because of scheduling requirements. *Id.* at ¶ 27.

274. Plaintiffs' expert Dr. Ernest Manuel has developed a model for calculating these damages on a vehicle-by-vehicle basis using, among other data points, GM data identifying each vehicle that received a recall repair; vehicle registration zip code data and dealership addresses to estimate drive-times; GM's own recall bulletins that estimate repair times; and average local hourly wages. *Id.* at pp. 7-15.

275. For each bellwether state, Dr. Manuel is able to estimate damages on a per-vehicle model basis for the value of time spent per visit obtaining recall repairs, *id.* at Tab 10, as well as the total value of time spent obtaining recall repairs based on the state average value of time spent per visit for both a zero transportation wait time and a 10-minutes transportation wait time. *Id.* at Tab 12.

276. While Dr. Manuel's model is not complete, *id.* at ¶ 79(c),⁴ the consequential damages estimate that he will perform is a vehicle-by-vehicle "ground up" calculation providing a common methodology to measure and quantify damages on a [sub]class-wide basis. Dr. Manuel's estimation method is conservative, relies on reliable data, industry practice, and sound methods. *Id.* at ¶ 35.

VIII. GM KNEW OF DEFECTS ON ITS FIRST DAY OF EXISTENCE

277. Prior to July 10, 2009, General Motors Corporation (Old GM) designed, manufactured, marketed, warranted, and distributed motor vehicles to independent dealers for ultimate sale to retail consumers. Ex. 1 at ¶ 32 (GM Answer).

278. On June 1, 2009, Old GM filed a Chapter 11 bankruptcy petition (Ex. 2 at ¶ 1 (GM LR 56.1 Response); *In re Motors Liquidation Co.*, 829 F.3d 135, 145 (2d Cir. 2016)), and on July 10, 2009, Old GM sold substantially all of its assets to Defendant General Motors LLC (GM) in a transaction pursuant to 11 U.S.C. § 363 (Sale). Ex. 2 at ¶ 2 (GM LR 56.1 Response); *In re Motors Liquidation Co.*, 829 F.3d at 146.

279. On July 5, 2009, the United States Bankruptcy Court for the Southern District of New York entered an order approving the June 26, 2009 Amended and Restated Master Sale and Purchase Agreement, wherein GM acquired certain Old GM assets (Sale Agreement). *In re General Motors Corp.*, 407 B.R. 463 (Bankr. S.D.N.Y. 2009). The Sale closed on July 10, 2009.

280. The Sale Agreement provides that New GM shall assume: (a) "all liabilities to third parties for death, personal injury, or other injury to Persons or damage to property caused by motor vehicles . . . manufactured, sold or delivered by [Old GM] . . . which arise directly out

⁴ The additional data needed to complete the aggregate damages calculation for lost time will be provided by GM if relevant classes are certified and will allow Dr. Manuel to remove from the damage calculation certain Old GM vehicles first sold new to customers before July 10, 2009. *Id.*

of accidents . . . That happen on or after the Closing Date . . .” (SJ Ex. 42, Sale Agreement at § 2.3(a)(ix)).

281. The Sale Agreement also provides that New GM shall assume “all liabilities arising under express written warranties of [Old GM] . . .” (*Id.* at § 2.3(a)(vii)).

282. The Sale Agreement requires that “[f]rom and after the Closing, [New GM] shall comply with the certification, reporting and recall requirements of the National Traffic and Motor Vehicle Safety Act [Safety Act] . . . In respect of vehicles and vehicle parts manufactured or distributed by [Old GM].” (*Id.* at § 6.15).

283. GM regularly collected and monitored field performance information regarding Old GM vehicles from a variety of sources, including NHTSA, accident reporting services, dealerships, and its customer complaint databases. SJ Ex. 26 (GM-MDL2543-000699647 at 650).

284. After the bankruptcy sale, GM retained at least 24 engineers, lawyers, and executives who knew about the Delta ignition switch defect while acting within the scope of their authority at Old GM. *See In re Motors Liquidation Co.*, 2015 Bankr. LEXIS 1296, at *54 (Bankr. S.D.N.Y. Apr. 15, 2015).

285. GM made employment offers to all of Old GM’s non-unionized employees and to unionized employees represented by the United Automobile Workers union. Ex. 2 at ¶ 46 (GM LR 56.1 Response).

286. Seven out of 13 of GM’s Directors immediately after the Sale had previously been associated with Old GM as a Board member (or, in the case of one GM Director, an advisor), and all 11 of GM’s Executive Officers had previously been associated with Old GM. *Id.* at ¶¶ 76-77.

287. GM began operating the automaker business of Old GM. *In re Motors Liquidation Co.*, 829 F.3d at 147.

288. Since July 10, 2009, GM designed, manufactured, marketed, warranted, and distributed motor vehicles to independent dealers for ultimate sale to retail consumers, and GM dealers also distributed certified pre-owned vehicles. *Id.* GM certified to the public the safety of these certified pre-owned vehicles. Ex. 1 at ¶ 2 (GM Answer).

289. The TREAD Act and related regulations require the quarterly submission to NHTSA of “early warning reporting” data, including incidents involving death or injury, claims relating to property damage received by the manufacturer, warranty claims paid by the manufacturer, consumer complaints, and field reports prepared by the manufacturer’s employees or representatives concerning failure, malfunction, lack of durability, or other performance issues. 49 U.S.C. § 30166(m)(3); 49 C.F.R. § 579.21. Manufacturers must retain for five years all underlying records on which the early warning reports are based and all records containing information on malfunctions that may be related to motor vehicle safety. 49 C.F.R. §§ 576.5-576.6.

290. Old GM used several processes to identify safety issues, including the TREAD database and the Problem Resolution Tracking System (PRTS), and GM continued these processes. *See* Ex. 32 at 282-313 (Valukas Report).

291. The TREAD database, used to store the data required for the quarterly NHTSA early warning reports, was the principal database used by Old GM (and then GM) to track incidents related to GM-branded vehicles. *Id.* at 306. The database includes information from (i) customer service requests; (ii) repair orders from dealers; (iii) internal and external surveys; (iv) field reports from employees who bought GM-branded vehicles and from Captured Test

Fleet reports; (v) complaints from the OnStar call center; and (vi) a database maintained by GM legal staff to track data concerning complaints filed in court. *Id.*

292. A TREAD reporting team, headed up first for Old GM and then for GM by Dwayne F. Davidson, conducted monthly database searches and prepared scatter graphs to identify spikes in the number of accidents or complaints related to various GM-branded vehicles. *Id.* at 307.

293. Mr. Davidson, who was in charge of TREAD reporting for both Old GM and GM, testified that, after the Sale, he was “still doing the TREAD reporting for the company.” SJ Ex. 28 at 205:17-25 (May 15, 2015 Davidson Dep.). His title—senior manager TREAD Act Reporting—remained the same from well before the bankruptcy until June 1, 2014. *Id.* at 206:2-12. His duties also remained the same until June of 2014—and included “pulling data for the engineers and investigators” for use in TREAD reporting. *Id.* at 206:13-23.

294. Mr. Davidson testified that “[t]he TREAD system itself did not change,” nor did the way in which Mr. Davidson and other TREAD team members access the TREAD system. *Id.* at 207:10-22. In other words, both the TREAD database and the “interface” with that database remained the same before and after the Sale. *Id.* at 210:16-211:2.

295. While the size of Mr. Davidson’s TREAD reporting team decreased after the Sale, *id.* at 210:16-211:2, Mr. Davidson was adamant that he “kept the key people to keep the company compliant. I kept the key folks that knew how do that,” including “Todd Palmatier, Paul Kelly, and Greg O’Sickey.” *Id.* at 209:1-210:5. As in the case of Mr. Davidson, those “key people” continued to perform the same key duties they had prior to the Sale. *Id.* at 210:9-11.

296. Through the TREAD reporting team alone, then, GM had knowledge of all the safety defects in Old GM vehicles from day one of its existence on July 10, 2009.

297. The TREAD team was not the only means through which GM had this knowledge, as virtually all of the pre-Sale documents and personnel discussed herein went seamlessly from Old GM to GM.

298. GM retained substantially all of Old GM's employees. *See, e.g.*, Ex. 2 at ¶ 46 (GM LR 56.1 Response). And GM personnel generally had the same jobs with the same responsibilities which they executed using the same information they had while at Old GM. *See, e.g.*, SJ Ex. 27 at 18:10-19:14 (May 7, 2015 Beauregard Dep.); SJ Ex. 28 at 204:21-207:24 (May 15, 2015 Davidson Dep.); SJ Ex. 24 at 20:18-21:12 (June 1, 2015 Modi Dep.); SJ Ex. 29 at 274:1-20 (June 8, 2015 Oakley Dep.); SJ Ex. 30 at 90:21-92:5 (July 15, 2015 Nowak-Vanderhoef Dep.); SJ Ex. 31 at 174:15-175:6 (Aug. 26, 2015 Parks Dep.); SJ Ex. 32 at 16:6-17:6 (Aug. 26, 2015 Judis Dep.).

299. For example, William Chase, a warranty engineer who analyzed Delta Ignition Switches in Cobalt and HHR vehicles in 2005, testified that his job duties did not change between the beginning of 2009 and his retirement in October 2009. During that period he used knowledge and experience that he gained working for Old GM in the performance of his job duties for GM. Chase reported to the same person in September 2009 that he reported to in March 2009. And he had access to the same data systems in October 2009 that he had access to in July 2009. SJ Ex. 33, Chase Dep. at 53:9-54:19; 56:23-58:7.

300. In January 2009, Alberto Manzor became the Program Engineering Manager for the Chevy Cruze, and kept that same position during and after Old GM's transformation into New GM. In January 2007, before becoming the Program Engineering Manager for the Cruze, Mr. Manzor was the Production Engineering Manager for the Cobalt. SJ Ex. 34, Manzor Dep. at 298:2-9; 301:10-302:6.

301. Steven Oakley, Brand Quality Manager for the Cobalt, testified that after the bankruptcy, he retained access to the same data systems that he had been using before July of 2009. And no one at GM instructed Mr. Oakley to differentiate between complaints or inquiries concerning Old GM cars and those concerning GM cars. SJ Ex. 29, Oakley Dep. at 274:1-20.

302. Brian Thompson, former engineering group manager in product development at Old GM, testified in his deposition that immediately following the Sale, he had the same job title and duties, and reported to the same manager, at GM that he had had at Old GM. SJ Ex. 35, Dep. of Brian Thompson (Aug. 26, 2015), at 214:10-218:4).

303. GM's legal department was also comprised of the same personnel as in the days of Old GM. At GM, these personnel knew of the defects through both knowledge they acquired before the Sale and additional knowledge they obtained after the Sale. *See, e.g.*, SJ Ex. 36, May 19, 2015 Deposition of Jaclyn Palmer at 231:15-19, 247:12-248:5, 267:14-20.

304. Jaclyn C. Palmer, Michael Gruskin and Doug Brown were among those who were in-house attorneys at both Old GM and GM, and attended the Roundtable meetings during which the company discussed whether (and for how much) cases against GM should be settled—including cases involving the Delta Ignition Switch defect. Ex. 32 at 106-07 (Valukas Report). Although the main function of the Roundtable was to evaluate claims and generate settlement forecasts, the Roundtable “had a second function as well: to spot trends indicating safety issues.” *Id.* at 108.

305. Palmer has stated that “attorneys discussed potential safety or accident trends at Roundtable on occasion, and the Roundtable Committee referred issues to GM engineers for a follow-up investigation.” *Id.* The Delta Ignition Switch Defect was discussed at Roundtables both before and after the Sale. *See id.* at 110-112 (2006 Roundtable discussions of accidents

caused by Ignition Switch Defect); *id.* at 130 (2008 Roundtable discussion of accident caused by Ignition Switch Defect); *id.* at 148 (2011 Roundtable discussion of accident caused by Ignition Switch Defect); *id.* at 163 (2012 Roundtable discussion of accident caused by Ignition Switch Defect).

306. Likewise, the same engineering personnel who were involved with investigating the Delta Ignition Switch Defect and other safety issues performed the same functions at both Old GM and GM. For example, both Old GM and GM used Field Performance Assessment (“FPA) engineers to assist in defending product claims. *Id.* at 105. “FPA engineers are assigned to gather information and assess technical issues in lawsuits and [not-in-suit matters.]” *Id.* at 106. Their assessments “are the lawyers’ primary source of technical information for the early case evaluations....” *Id.*

307. While at Old GM, FPA engineer Kathy Anderson was assigned to fatal crashes involving the Delta Ignition Switch defect and airbag nondeployment. *Id.* at 112. Anderson was then involved in the investigation of other fatal airbag nondeployment cases for GM in 2010 and 2011. *Id.* at 140, 148.

308. John Sprague was another FPA engineer at both Old GM and GM. After a meeting with airbag manufacturer Continental in May of 2009, Sprague collected information regarding power mode status, added it to his spreadsheet of airbag nondeployment not-in-suit matters and lawsuits, and discovered that the power mode was recorded as Off or Accessory in a number of accidents. *Id.* at 135. Sprague continued adding to his spreadsheet, and continued his involvement in investigating the Ignition Switch Defect, after he began working for GM. *See, e.g., id.* at 148 (Sprague involved in investigating post-Sale crashes involving Ignition Switch Defect).

IX. PLAINTIFFS SUBJECT TO THE SUMMARY JUDGMENT MOTION

A. California Plaintiffs

1. Patricia Barker

309. Patricia Barker purchased a new 2005 Saturn Ion, subject to Recall Nos. 14v047 and 14v153, in Torrance, California in March 2005. SJ Ex. 52 (Feb. 27, 2017 P. Barker Dep. at 12:18-21); SJ Ex. 53 (GM-MDL2543-305118906-907); SJ Ex. 54 (ELPLNTFF00010089-090); SJ Ex. 55 (ELPLNTFF00010121).

310. Ms. Barker purchased the Ion because her previous Saturn, an SL1, saved her life in a car accident. SJ Ex. 52 (Feb. 27, 2017 P. Barker Dep. at 177:24-179:3). While at the GM dealership, she specifically requested a Saturn that was as safe and reliable as her last one, and the salesman told her the Ion was “safe, well-built, reliable, easy maintenance, all the things [she] was looking for that [she] had in the SL1.” *Id.* at 177:24-179:3; 180:8-13. If Ms. Barker had any doubts about the Ion then she never would have purchased it. *Id.* at 177:24-179:3.

311. Ms. Barker viewed JD Power awards and GM posters and television advertisements in the waiting room of the GM dealership when she bought her vehicle. *Id.* at 172:14-174:7. The JD Power awards mentioned safety and integrity. *Id.* at 174:14-18. From about 2004 to 2007, Ms. Barker saw Saturn television advertisements noting that its vehicles received JD Power awards for safety and reliability. *Id.* at 182:9-183:5. She believes these advertisements were “predicated on falsehoods” because they were “intended to make me believe the car’s safe,” and that these advertisements are false because her Ion is unsafe. *Id.* at 182:9-183:5; 184:3-11. Ms. Barker also considers the Saturn newspaper advertisements she saw discussing the safety of its cars to be false today. *Id.* at 186:6-17; 188:6-189:11.

312. Ms. Barker experienced one incident where her vehicle lost power while she was driving, and about a dozen instances where she could not turn the key in the ignition to start the

vehicle. *Id.* at 138:18-139:7; 149:3-16. Three or four of the latter instances occurred after the ignition switch recall repair was conducted. *Id.* at 154:5-14. A Pep Boys mechanic also experienced this key problem with her vehicle. *Id.* at 154:19-155:3. Ms. Barker continues to experience events in which she cannot turn the key in the ignition. *Id.* at 138:18-139:2; 147:23-148:17; 149:3-16; 150:13-21; 154:10-14.

313. In April 2012, the power steering recall repair was conducted on Ms. Barker's vehicle, and in March or April 2014, the ignition switch recall repair was conducted on Ms. Barker's vehicle. *Id.* at 62:3-12; 63:22-64:14. GM had Ms. Barker's vehicle for forty-nine days for the ignition switch repair. *Id.* at 62:3-12.

314. Ms. Barker read about Old GM's bankruptcy online and in the L.A. Times around the time GM announced the ignition switch defect. *Id.* at 230:4-14. In 2014, Barker was unaware that she could sue Old GM in bankruptcy. *Id.* at 251:7-24. She first considered filing a claim against Old GM around the time she found out the defective ignition switch was in her vehicle, but she cannot remember the specific date. *Id.* at 231:2-19. Ms. Barker filed a late Proof of Claim against Old GM in December 2016. *Id.* at 232:24-233:16.

315. Ms. Barker never would have purchased her vehicle had she known about the ignition switch defect. *Id.* at 166:1-6; 266:12-15; 268:17-24.

316. When asked how much she overpaid for the vehicle, Ms. Barker testified, "I hadn't even thought about it up until this case came up. But considering if I had known about the defect, I would never have purchased the car in the first place, I'd say a hundred percent." *Id.* at 166:1-6. Ms. Barker is relying on expert analysis and opinion to prove her damages. SJ Ex. 56 (Barker PFS Q 424, 430 at ELPLNTFF00010176-177).

2. Chimen Basseri

317. Chimen Basseri purchased a used 2011 Chevrolet HHR, subject to Recall No. 14v047, in Valencia, California on March 5, 2013. SJ Ex. 57 (Nov. 22, 2017 C. Basseri Dep. at 8:19-23; 98:5-7; 122:23-25); SJ Ex. 58 (ELPLNTFF00010252-254); SJ Ex. 59 (ELPLNTFF00010241-242).

318. Ms. Basseri “chose this vehicle, in part, because the vehicle’s safety and reliability was important to her.” SJ Ex. 57 (Nov. 22, 2017 C. Basseri Dep. at 39:4-11). She also viewed GM advertisements online and on television “guarantee[ing] good, reliable cars,” and she relied on these advertisements in purchasing her vehicle. *Id.* at 106:12-108:13; SJ Ex. 63 (C. Basseri PFS Q 433 at ELPLNTFF00010315).

319. Ms. Basseri paid for various vehicle services and repairs at GM dealerships. SJ Ex. 61 (ELPLNTFF00010206-214); SJ Ex. 62 (ELPLNTFF00010249-251).

320. In June 2014, the ignition switch recall repair was conducted on Ms. Basseri’s vehicle. SJ Ex. 57 (Nov. 22, 2017 C. Basseri Dep. at 51:12-15); SJ Ex. 59 (ELPLNTFF00010241-242).

321. In 2016, Ms. Basseri experienced two incidents where she had trouble with her ignition key. SJ Ex. 57 (Nov. 22, 2017 C. Basseri Dep. at 43:12-25); SJ Ex. 63 (C. Basseri PFS Q 50, 80 at ELPLNTFF00010279, ELPLNTFF00010283). In both instances, she was unable to pull the key out of the ignition. SJ Ex. 57 (Nov. 22, 2017 C. Basseri Dep. at 126:12-128:11). In 2016, Ms. Basseri called GM customer service and a local GM dealership to complain about the vehicle’s key sticking in the ignition. SJ Ex. 64 (GM-MDL2543-105197323-325); SJ Ex. 57 (Nov. 22, 2017 C. Basseri Dep. at 118:21-119:13).

322. Ms. Basseri replaced her vehicle’s remote fob twice out-of-pocket: once in March 2013 at Tracy Chevrolet and once in August 2016 at Sanborn Chevrolet. SJ Ex. 61

(ELPLNTFF00010206-208); SJ Ex. 62 (ELPLNTFF00010250-251); SJ Ex. 65 (GM-MDL2543-305120108-109).

323. Ms. Basseri rented another vehicle several times because she was not sure her HHR would be reliable. SJ Ex. 57 (Nov. 22, 2017 C. Basseri Dep. at 72:23-73:8).

324. Ms. Basseri would not have purchased her vehicle if GM had told her it had a safety defect in it that could injure or kill her or if GM had told her it contained a defect like the Delta Ignition Switch Defect. *Id.* at 129:16-21; 131:7-15.

325. Ms. Basseri is relying on expert analysis and opinion to prove her damages. SJ Ex. 63 (C. Basseri PFS Q 424, 430 at ELPLNTFF00010314).

3. Michael and Sylvia Benton

326. Michael and Sylvia Benton purchased a used 2005 Chevrolet Cobalt, subject to Recall No. 14v047, in Barstow, California on January 10, 2009. SJ Ex. 66 (Feb. 28, 2017 Sylvia Benton Dep. at 17:25-18:2; 18:21-23; 80:1-3); SJ Ex. 67 (ELPLNTFF00010323-325); SJ Ex. 68 (ELPLNTFF00010330-331).

327. The Bentons purchased the Cobalt because, “[w]e wanted something reliable that was a good price for us, since we had just went through bankruptcy. So we needed a car that was safe and reliable.” SJ Ex. 66 (Feb. 28, 2017 S. Benton Dep. at 48:11-17; 50:19-25). Safety was an important issue for them in buying the car. *Id.* at 51:7-9. They also chose the Cobalt because it was bigger and Michael avoided small cars “for safety issues.” *Id.* at 52:2-10. Michael relied on television commercials touting the vehicle’s safety and reliability, too, and he now believes those advertising statements were false because of the ignition switch defect and GM’s concealment of it. SJ Ex. 69 (Feb. 28, 2017 M. Benton Dep. at 57:11-60:22). The Bentons also relied on the salesman’s statements about the vehicle being safe, reliable, dependable, and “a gas

saver.” SJ Ex. 66 (Feb. 28, 2017 S. Benton Dep. at 52:18-21; 65:8-18); SJ Ex. 69 (Feb. 28, 2017 M. Benton Dep. at 65:24-66:18).

328. The Cobalt shutoff on Michael twenty-five to thirty times while he was driving. SJ Ex. 69 (Feb. 28, 2017 M. Benton Dep. at 133:3-17). In all of these instances he did not inspect the position of the key, testifying, “I never inspected it. I always turned it back on. You know, I would finish shutting it off, and then turn it back on to start the car.” *Id.* at 140:5-12; 178:16-19. In the single incident where the vehicle shutdown on Sylvia while she was driving, she does not know the key position because she was not paying attention to that. SJ Ex. 66 (Feb. 28, 2017 S. Benton Dep. at 25:12-26:3).

329. In April 2014, the ignition switch recall repair was conducted on the Bentons’ vehicle. SJ Ex. 66 (Feb. 28, 2017 S. Benton Dep. at 82:4-15); SJ Ex. 69 (Feb. 28, 2017 M. Benton Dep. at 76:14-24).

330. Sylvia stopped driving the vehicle altogether after the recall announcement, but Michael had to drive the car to get to work. SJ Ex. 66 (Feb. 28, 2017 S. Benton Dep. at 20:18-21:18; 102:13-20). Michael was the primary driver of the vehicle and commuted eighty miles roundtrip, six days a week for work. SJ Ex. 69 (Feb. 28, 2017 M. Benton Dep. at 17:25-18:18). Michael modified his driving habits in the Cobalt because of the frequent shutdowns, testifying, “I didn’t drive in the far lane, I drove in the middle lane because of it shutting off, so I could quickly get over to the shoulder. And, I mean, that’s a scary situation, scary situation.” *Id.* at 136:7-137:3.

331. The Bentons replaced the Cobalt’s catalytic converter twice, in April 2013 and July 2013, and also the O2 sensor in an attempt to troubleshoot the shutdown events. *Id.* at 83:6-90:22; SJ Ex. 70 (ELPLNTFF00010361-362). With regard to these troubleshooting repairs,

Michael testified, “all my issues that revolved around that car were from it shutting down, me trying to diagnose it myself and trying to figure out what could be wrong with this car. I did full-body throttle clean outs on it, new injectors, spark plugs, the O2 sensor, catalytic converter, all this--all this work to this car.” SJ Ex. 69 (Feb. 28, 2017 M. Benton Dep. at 95:3-17). These repairs did not fix the shutdown issue because they were related to the ignition switch defect all along. *Id.* at 134:4-18. The Bentons were not “made whole” by the free recall repair because they paid out-of-pocket for these troubleshooting repairs before GM admitted the ignition switch defect. *Id.* at 155:15-156:9.

332. When asked how much she thought she should have paid for the vehicle, Sylvia testified, “I would have paid zero for it. I would not have bought it.” SJ Ex. 66 (Feb. 28, 2017 S. Benton Dep. at 101:13-23). Sylvia would not have purchased the vehicle had she known about the ignition switch defect. *Id.* at 78:3-79:7; 81:6-14; 101:24-102:4; 103:5-16. Michael believes they overpaid for the vehicle because GM failed to disclose the ignition switch defect before its purchase. SJ Ex. 69 (Feb. 28, 2017 M. Benton Dep. at 132:19-23; 135:10-18; 149:10-16; 151:8-18; 178:25-181:25).

333. The Bentons are relying on expert analysis and opinion to prove their damages. SJ Ex. 71 (Benton PFS Q 424, 430 at ELPLNTFF00010412).

4. Kimberly Brown-Shipley

334. Kimberly Brown-Shipley purchased a new 2006 Chevrolet HHR, subject to Recall No. 14v047, in Palmdale, California on January 7, 2007. SJ Ex. 72 (Apr. 24, 2017 K. Brown Dep. at 26:25-27:5); SJ Ex. 73 (ELPLNTFF00009905-907); SJ Ex. 74 (ELPLNTFF00009889-890).

335. Ms. Brown-Shipley and her husband purchased the vehicle because the GM dealership salesman told them it was a good, safe, and reliable car, and he also gave them the

vehicle's safety ratings. SJ Ex. 72 (Apr. 24, 2017 K. Brown-Shipley Dep. at 32:20-35:13). Ms. Brown-Shipley saw a poster in the GM dealership saying the HHR was a reliable car. *Id.* at 122:1-24.

336. In July 2014, the ignition switch recall repair was conducted on Ms. Brown-Shipley's vehicle. *Id.* at 157:7-158:7; SJ Ex. 75 (GM-MDL2543-305120276).

337. Ms. Brown-Shipley experienced approximately fifty shutdown events while she was driving the vehicle, and twenty or more of them occurred after the recall repair was conducted. SJ Ex. 72 (Apr. 24, 2017 K. Brown-Shipley Dep. at 61:8-10; 92:12-23). She always had to turn the key forward to turn the engine back on after these incidents, and she believes the ignition switch defect caused these shutdown events. *Id.* at 94:12-20; 95:4-21. At one point after the recall repair, Ms. Brown-Shipley spoke to a GM district manager on the phone about the shutdowns but GM did not resolve the issue. *Id.* at 93:4-25. She continued to drive the car after that, but when another shutdown happened, she took the car to her local GM dealership and "told them to fix it, tow it, send it back to General Motors, and [she] walked out." *Id.* at 94:1-8. Her husband eventually picked the car up from the dealership. *Id.* at 94:9-11.

338. Ms. Brown-Shipley repeatedly reported the shutdown incidents to GM both before and after the recall repair. *Id.* at 79:3-17; 87:9-16; SJ Ex. 76 (GM-MDL2543-105193329-331); SJ Ex. 77 (GM-MDL2543-105193386-388); SJ Ex. 78 (GM-MDL2543-105194256-259); SJ Ex. 79 (GM-MDL2543-105195657-659); SJ Ex. 80 (GM-MDL2543-105195715-719); SJ Ex. 81 (GM-MDL2543-105195831); SJ Ex. 82 (GM-MDL2543-105195832).

339. Ms. Brown-Shipley generally understood what triggered the shutdown events, testifying, "If I hit a bump, if the pavement was uneven, even if I hit a pebble in the street, it would shut off. I could be driving and it would just shut off on me." SJ Ex. 72 (Apr. 24, 2017

K. Brown-Shipley Dep. at 60:12-61:3). Ms. Brown-Shipley does not believe a different issue was causing the continued shutdowns post-recall repair, because “the recall on the ignition switch and it--the problem never changed. And I was told it was cutting out because of the ignition switch. So if they would have replaced it, it should have stopped, but it never stopped. And no one told me it was something else.” *Id.* at 100:20-101:13. Ms. Brown-Shipley has no training or expertise in performing maintenance work on vehicles, and her training, education, and expertise in the technical or mechanical performance of a vehicle is limited to her time as a train and bus operator. *Id.* at 21:15-22:17.

340. Before the recall, Ms. Brown-Shipley drove the HHR in a carpool with coworkers roughly forty miles to their workplace, and transported her grandchildren in the vehicle. *Id.* at 47:12-21. Even though Ms. Brown-Shipley stills owns the vehicle, she parked it at her home and has not driven it in more than two years. *Id.* at 49:10-23. Ms. Brown-Shipley spent \$3,200 on a used vehicle to drive instead of the HHR because of the ignition switch defect. *Id.* at 148:1-149:5.

341. Ms. Brown-Shipley lost time from work for the vehicle repairs. *Id.* at 146:16-147:2.

342. Ms. Brown-Shipley learned about Old GM’s bankruptcy sometime after 2009 but before this lawsuit. *Id.* at 168:25-169:17.

343. Ms. Brown-Shipley believes her vehicle is worthless because it is unsafe. *Id.* at 150:19-151:5. Ms. Brown-Shipley will not sell her vehicle because “the car is a death trap” and she is “afraid for someone to drive that vehicle.” *Id.* at 51:6-12; 51:21-25. She would have sold the vehicle if there had been no safety issues with it, and she believes that but for the ignition switch defect she would have received a reasonable price. *Id.* at 170:24-171:17.

344. Ms. Brown-Shipley is relying on expert analysis and opinion to prove her damages. SJ Ex. 83 (K. Brown-Shipley PFS Q 424, 430 at ELPLNTFF00010461-462).

5. Kellie Cereceres

345. Kellie Cereceres purchased a new 2012 Chevrolet Traverse, subject to Recall No. 14v118, in Elk Grove, California on June 16, 2012. SJ Ex. 84 (ELPLNTFF00015637-639).

346. Ms. Cereceres purchased the Traverse in part because safety and reliability was important to her. SJ Ex. 85 (Dec. 18, 2017 K. Cereceres Dep. at 26:17-27:11). She saw Traverse commercials and thought, “that’s my next car.” *Id.* at 88:18-22; 94:21-25. Ms. Cereceres obtained a GM brochure for the 2012 Traverse before purchasing her vehicle and it “greatly” affected her decision to buy the car because, as she testified, “I loved all the safety components in it, because I drive it, and I have children in the car and their friends in the car.” *Id.* at 88:4-89:12; 91:9-24. She reviewed the brochure and “read all the safety issues on it,” and then kept it near her office as a sort of “vision board.” *Id.* at 88:7-17.

347. The vehicle’s service airbag light came on before the recall repair was conducted.” *Id.* at 28:9-29:20. Ms. Cereceres is not an expert in the technical or mechanical performance of motor vehicles. *Id.* at 72:5-8.

348. Ms. Cereceres never received a recall notice and “was driving around in a car that [she] had no idea had a [sic] airbag recall on it.” *Id.* at 52:22-53:2; 82:23-83:13; 84:25-85:3. Because she never had an accident in the vehicle that would have triggered the airbags, Ms. Cereceres does not know whether her vehicle’s safety features operated the way they were intended, but finding out about the recall afterward “didn’t strengthen [her] confidence” in the Traverse. *Id.* at 92:16-93:6.

349. In April 2014, the recall repair was conducted on her vehicle. *Id.* at 31:6-15, 52:22-53:16. Ms. Cereceres does not know whether GM fixed the airbag defect in her vehicle, but she hopes the recall repair was performed correctly. *Id.* at 99:18-25; 101:8-13.

350. Ms. Cereceres would not have paid as much and probably would not have purchased her vehicle had she known about the defect. *Id.* at 51:5-15; 118:2-7.

351. Ms. Cereceres is relying on expert analysis and opinion to prove her damages. SJ Ex. 86 (K. Cereceres PFS Q 424, 430 at ELPLNTFF00016368-369).

6. Crystal Hardin

352. Crystal Hardin purchased a new 2005 Chevrolet Cobalt, subject to Recall No. 14v047, in Stockton, California in April 2005. SJ Ex. 87 (Mar. 2, 2017 C. Hardin Dep. at 27:12-24; 62:6-12; 123:8-12); SJ Ex. 88 (ELPLNTFF00013106-107); SJ Ex. 89 (ELPLNTFF00013218-219).

353. In July 2014, the ignition switch recall repair was conducted on her Cobalt. SJ Ex. 87 (Mar. 2, 2017 C. Hardin Dep. at 216:8-217:8).

354. Ms. Hardin experienced two shutdown events while driving her Cobalt. *Id.* at 85:4-11; 182:4-183:1. In the first shutdown incident, the car “completely shut off” and the engine “died” as Ms. Hardin approached a stoplight. *Id.* at 192:16-20; 193:21-194:1. In May 2016, after the vehicle had the recall repair, Ms. Hardin’s vehicle shutdown while she was driving on the freeway. *Id.* at 23:9-14; 186:8-18. The incident “really shook [her] up,” and “[she] drove the vehicle home and parked it and never got into it again.” *Id.* at 23:9-14. Ms. Hardin believes both shutdown incidents are linked to the ignition switch defect. *Id.* at 246:16-247:2.

355. In December 2016, Ms. Hardin sold the Cobalt for \$300. *Id.* at 150:17-25. Before she sold it, Ms. Hardin unsuccessfully attempted to sell the vehicle for \$1,000, which was

less than the Kelley Blue Book value at the time. *Id.* at 68:6-72:12; 73:2-10; 78:17-79:16; 82:15-83:10.

356. Ms. Hardin was aware of the Old GM bankruptcy in 2009 because “it was all over the news.” *Id.* at 276:20-277:2.

357. Ms. Hardin would not have purchased her vehicle had she known about the defect and she now believes she paid too much for it. *Id.* at 86:19-87:13; 235:25-236:8; 267:25-268:5; 279:6-282:1. She does not believe her vehicle was reliable and she will not purchase another GM car in the future. *Id.* at 252:19-253:6.

358. When asked how much she overpaid for the vehicle, Ms. Barker testified, “I hadn’t even thought about it up until this case came up. But considering if I had known about the defect, I would never have purchased the car in the first place, I’d say a hundred percent.” *Id.* at 166:1-6. Ms. Hardin is relying on expert analysis and opinion to prove her damages. SJ Ex. 90 (C. Hardin PFS Q 424, 430 at ELPLNTFF00014384-385).

7. Javier Malaga

359. Javier Malaga purchased a used 2006 Chevrolet Cobalt, subject to Recall No. 14v047, in Carson, California on November 20, 2006. SJ Ex. 91 (ELPLNTFF00009405-408); SJ Ex. 92 (ELPLNTFF00009410-411).

360. Mr. Malaga was looking for a reliable car when he purchased his vehicle, and his father had always preached to him that GM was a more quality vehicle than Ford. SJ Ex. 93 (Mar. 24, 2017 J. Malaga Dep. at 52:9-15). In speaking about the purchase of his car, Mr. Malaga testified, “I was changing jobs, and I was supposed to be doing some sales. So I needed some reliable, safety [sic] wheels [referring to car], you know, to be able to take potential customers, go visit them and maybe take them to business lunches.” *Id.* at 50:16-51:2. By “safe” Mr. Malaga explained he meant, “something that, you know, in case something happens, it’s

going to protect you,” and “GM always had a good reputation in that regard from what I remember.” *Id.* at 55:3-13. He was looking for specific safety features such as good brakes and steering. *Id.* at 55:14-18.

361. Mr. Malaga had his vehicle serviced and repaired at his local GM dealership. SJ Ex. 94 (J. Malaga PFS Q 105 at ELPLNTFF00011333); SJ Ex. 95 (ELPLNTFF0009375-376); SJ Ex. 96 (ELPLNTFF00009338-342).

362. Mr. Malaga has experienced two incidents involving his ignition switch that he believes are related to the ignition switch defect. SJ Ex. 93 (Mar. 24, 2017 J. Malaga Dep. at 87:11-25; 99:10-17). On or around May 16, 2007, Mr. Malaga experienced issues where the key would stick in the ignition or would not turn to start the car. *Id.* at 88:3-91:2; 93:12-23. He took the car to Cormier Chevrolet where it was repaired under warranty. SJ Ex. 97 (ELPLNTFF00014057-060). On or around March 25, 2010, Mr. Malaga again experienced issues where the key would stick in the ignition or would not turn to start the car. SJ Ex. 93 (Mar. 24, 2017 J. Malaga Dep. at 99:18-101:25). Cormier Chevrolet replaced the ignition switch, but this time Mr. Malaga paid \$353.52 out-of-pocket for the repairs. SJ Ex. 96 (ELPLNTFF00009338-342).

363. On November 1, 2014, the ignition switch recall repair was conducted on the vehicle. SJ Ex. 93 (Mar. 24, 2017 J. Malaga Dep. at 116:11-15).

364. Mr. Malaga knew about Old GM’s bankruptcy when it was happening because he saw it on the news. *Id.* at 9:13-17; 169:1-6. He also read in the news that there was a day by which creditors had to file their claims. *Id.* at 169:8-170:3. But Mr. Malaga did not know there was a bar date for claims. *Id.* at 170:4-7.

365. On July 30, 2016, Mr. Malaga sold the vehicle. *Id.* at 67:14-19; 73:20-25.

366. Mr. Malaga testified, “I was, unbeknownst to me, indirectly given a product that is faulty, defective, you know, and on top of that, it put my life at risk. Okay? I could have been--who knows--maimed, killed as a result of that. And finally, you know, when I needed to sell the car, I wasn’t able to get what I should have been because of the defective parts affecting the overall safety of the car. It lowered its value because of the safety issue. People said, you know, if it’s a recall of this part, what else is wrong with the car? People automatically will think along those lines. They just said no.” *Id.* at 160:18-161:9.

367. Mr. Malaga is relying on expert analysis and opinion to prove his damages. SJ Ex. 94 (J. Malaga PFS Q 424, 430 at ELPLNTFF00011360-361).

8. Winifred Mattos

368. Winifred Mattos purchased a new 2007 Pontiac G5, subject to Recall No. 14v047, in Culver City, California on April 14, 2007. SJ Ex. 98 (Mar. 3, 2017 W. Mattos Dep. at 74:13-18); SJ Ex. 99 (ELPLNTFF00009872-874).

369. When she went to purchase her vehicle at the GM dealership, Ms. Mattos told the salesman she wanted a new, safe, pretty-looking car with better mileage, and the salesman brought her to the G5. SJ Ex. 98 (Mar. 3, 2017 W. Mattos Dep. at 28:13-29:3; 30:6-15; 30:24-31:2). The GM dealership salesman told her the G5 would be a reliable car that was suitable for her needs. *Id.* at 90:8-15. Ms. Mattos bought this car with the understanding that it would be safe “and then [she] found out that it really wasn’t, there had been problems with this ignition, and yet it still was used in [her] car, they continued to use this.” *Id.* at 49:7-20.

370. In April 2014, the ignition switch recall repair was conducted on her vehicle. *Id.* at 92:25-93:2. The ignition switch recall caused Ms. Mattos to drive her vehicle less because she was nervous driving it even after the recall repair. *Id.* at 44:14-25. Ms. Mattos did not drive her car and accepted rides in many instances because she felt her car was unsafe. *Id.* at 90:16-23.

371. Ms. Mattos lost \$60.00 in pay \$15/hour for the approximately four hours she took off work to take her car in for the ignition switch recall repair. *Id.* at 53:6-10; 54:2-57:11. She also spent more money on gas for the rental car she drove for the two weeks the dealership had her vehicle for the recall repair. *Id.* at 53:6-10; 58:19-59:11.

372. Mattos read that Old GM filed for bankruptcy. *Id.* at 104:1-6.

373. Had she known about the ignition switch defect, Ms. Mattos would never have bought the car because she would not have felt safe. *Id.* at 47:20-48:8; 53:16-20; 94:3-25.

374. Ms. Mattos is relying on expert analysis and opinion to prove her damages. SJ Ex. 100 (W. Mattos PFS Q 424, 430 at ELPLNTFF00011403-404).

9. Santiago Orosco

375. Santiago Orosco purchased a new 2010 Chevrolet Camaro, subject to Recall No. 14v346, in Dinuba, California in August 2009. SJ Ex. 101 (Mar. 9, 2017 S. Orosco Dep. at 12:1-5; 48:3-10; 52:18-21); SJ Ex. 102 (ELPLNTFF00011436); SJ Ex. 103 (ELPLNTFF00011439); SJ Ex. 104 (GM-MDL2543-305119609-610).

376. Mr. Orosco purchased the car for his daughter Dolores and therefore the vehicle's safety and reliability were very important to him. SJ Ex. 101 (Mar. 9, 2017 S. Orosco Dep. at 55:18-56:1; 56:9-11; 64:19-21; 73:5-74:22; 76:8-15). Mr. Orosco testified, "When, I was buying the Camaro for my daughter, I told the salesman that I was looking for a car that was safe and reliable for my daughter. The salesman stated 'this is one of the safest cars you can get for your daughter, and is very reliable. We redesigned the old Camaro and made the new Camaro better and safer.'" *Id.* at 73:5-74:22; SJ Ex. 105 (S. Orosco PFS Q 433 at ELPLNTFF00011516). The GM dealership salesman specifically represented to Mr. Orosco that the Camaro was a safer vehicle than the Mustang. SJ Ex. 101 (Mar. 9, 2017 S. Orosco Dep. at 55:18-56:1).

377. Sometime after he received the recall notice, Mr. Orosco went to a local GM dealership to discuss the recall repair and the GM dealership told him they did not have the parts available and that they would call him when they came in, but the dealership never called him. SJ Ex. 101 (Mar. 9, 2017 S. Orosco Dep. at 138:9-25).

378. In 2016, the car shutoff on Dolores while she was driving on the freeway. *Id.* at 102:9-103:25; SJ Ex. 203 (D. Peterson Decl., ¶ 2). The car “died” and the steering felt like it was locked up. SJ Ex. 203 (D. Peterson Decl., ¶ 4). She was able to steer the car to the side of the road, restart it, and drive home. *Id.* After this incident, Dolores would not drive the vehicle so, in August 2016, Mr. Orosco sold it to CarMax. *Id.* at ¶ 5; SJ Ex. 101 (Mar. 9, 2017 S. Orosco Dep. at 80:18-23; 198:21-199:14). Mr. Orosco testified, “The salesman came out there, looked at it, and said it was in very good shape. He says I don’t see anything where it’s been in any wrecks or anything. I don’t see any mismatched paints, rims are okay. He says but unfortunately all I can offer you is \$8,000 because we’re having trouble trying to move these Camaros now, with all the problems that they’re having.” SJ Ex. 101 (Mar. 9, 2017 S. Orosco Dep. at 80:24-81:8).

379. Mr. Orosco testified, “Well, I’ll tell you, if I would have known when I went shopping for that car that they had a problem, that these problems would come up, I would have walked away from that car very quick. And I think that a lot of people think the same way I do, you know, why are you going to put yourself in danger, if you know that there’s a problem with it, stay away from it.” *Id.* at 84:2-12. He also testified, “I overpaid for that car. Had I known that it was defective and had those problems, I never would have bought it.” *Id.* at 182:23-183:4.

380. Mr. Orosco is relying on expert analysis and opinion to prove his damages. SJ Ex. 105 (S. Orosco PFS Q 424, 430 at ELPLNTFF00011515).

10. David Padilla

381. David Padilla purchased a new 2010 Chevrolet Cobalt, subject to Recall Nos. 14v047 and 14v153, in Stockton, California in April 2010. SJ Ex. 106 (GM-MDL2543-304721739); SJ Ex. 107 (ELPLNTFF00006734); SJ Ex. 108 (GM-MDL2543-304721711-712); SJ Ex. 109 (GM-MDL2543-304721740).

382. The safety of the vehicle is very important to Mr. Padilla when he buys a car. SJ Ex. 110 (Feb. 17, 2017 D. Padilla Dep. at 97:16-23). When he went to buy the Cobalt, the GM dealership salesman told Mr. Padilla, “the car is perfect, nothing is wrong with it,” and Mr. Padilla believed this, “until [he] read in the paper what [was] going on.” *Id.* at 20:22-21:3. Mr. Padilla relied on the salesman’s statements, testifying, “I believe it when they say it is in good shape, especially a new car.” *Id.* at 37:25-38:4.

383. In July 2014, the ignition switch recall repair was conducted on the vehicle. SJ Ex. 108 (GM-MDL2543-304721712).

384. The recall repair was ineffective and afterward Mr. Padilla experienced two incidents where the key would not turn and he could not start the engine, testifying, “[w]ell, after the recall then I had problems with it. It stalled me twice downtown. It wouldn’t start. The key wouldn’t turn.” SJ Ex. 110 (Feb. 17, 2017 D. Padilla Dep. at 47:3-14; 49:17-22; 53:1-5; 64:5-7). The first incident occurred at the grocery store and he could not turn the ignition key to start the engine. *Id.* at 53:10-55:2. When the vehicle would not start, Mr. Padilla walked over to a mechanic’s garage for help and the mechanic charged him \$70 to get the car started. *Id.* at 55:3-57:16; 64:10-18. The second incident occurred less than a month or so after the grocery store incident. *Id.* at 60:21-61:9. After the incidents with the ignition switch, Mr. Padilla called the dealership and he says they told him “well, we fixed it,” and he responded, “then what—how come it stalled on me? The key wouldn’t turn.” *Id.* at 57:13-58:1; 68:6-11.

385. Because of these incidents, Mr. Padilla and his wife stopped driving the car and he decided to get rid of it. *Id.* at 30:20-24; 51:5-10; 63:18-64:1; 67:21-69:4. Mr. Padilla testified, “Soon after we got rid of it, yes. I wouldn’t drive it anymore, huh-uh, especially with the grandkids. I will give it away before you drive that car.” *Id.* at 57:3-8. Mr. Padilla gave the car to his grandson and told him to get it fixed, and his grandson traded it in for a different car. *Id.* at 52:18-25; 56:1-4; 58:2-7; 62:21-63:1; 90:23-91:7; 91:13-22.

386. Mr. Padilla purchased the vehicle for his wife to drive, but soon after the ignition switch story came out he sold it, testifying, “I wouldn’t even drive it anymore because I had a personal experience that scared the hell out of me. That’s why—that’s why I said nobody drove it. Got rid of it.” *Id.* at 31:6-9; 40:6-14. His wife was “hauling [their] grandchildren around” in the car. *Id.* at 31:2-5. He told his wife not to drive the car, testifying, “I was afraid she was going to stall with kids in the car.” *Id.* at 100:5-13. Mr. Padilla and his wife took the bus until they received a rental car while their vehicle was awaiting the recall repair. SJ Ex. 111 (D. Padilla PFS Q 424 at ELPLNTFF00007080); SJ Ex. 110 (Feb. 17, 2017 D. Padilla Dep. at 94:17-95:4).

387. Had he known there was a problem with the ignition switch before he bought the car, Mr. Padilla would not have purchased it because he has family that drives the car, testifying, “they couldn’t have gave me the car.” SJ Ex. 110 (Feb. 17, 2017 D. Padilla Dep. at 98:9-13; 98:17-19). When asked whether he thought he paid too much for the vehicle and whether he thought the vehicle was worth less because of the ignition switch, Padilla testified, “absolutely,” and said, “when I first bought it I thought I had a hell of a deal, but after that it was too late.” *Id.* at 100:1-8.

11. Esperanza Ramirez

388. Esperanza Ramirez purchased a new 2007 Saturn Ion, subject to Recall No. 14v047 and Recall No. 14v153, in Torrance, California on March 13, 2007. SJ Ex. 112 (Mar. 3, 2017 E. Ramirez Dep. at 12:11-18); SJ Ex. 113 (ELPLNTFF00009962-963); SJ Ex. 114 (ELPLNTFF00009943-944).

389. Ms. Ramirez told the GM dealership salesman she wanted a safe, reliable, and affordable car because she “had two small children, and I trusted them to go ahead and bring that out to me.” SJ Ex. 112 (Mar. 3, 2017 E. Ramirez Dep. at 59:21-60:14; 61:11-18). The GM dealership salesman told her it was a good, reliable, safe car that would last, and Ms. Ramirez felt safe and secure with what he told her. *Id.* at 60:21-61:2; 65:11-19. She saw advertisements about the Saturn before she bought the car and said, “there was always the family, the going to the dealer, and then showing the family going and them telling them how safe the car was, you know, just the typical driving. You would see--the commercial of families going to get--purchase the car and doing the everyday family errands, and driving your kids around, so that makes you feel...” *Id.* at 48:23-49:10. Ms. Ramirez purchased her vehicle because she was satisfied with her previous Saturn and because the advertisements led her to believe the brand was “the continued safe, family car.” *Id.* at 47:23-48:6.

390. Ms. Ramirez’s vehicle had problems with loose steering, the engine crank, and the engine light not shutting off. SJ Ex. 115 (E. Ramirez PFS Q 49 at ELPLNTFF00016852); SJ Ex. 112 (Mar. 3, 2017 E. Ramirez Dep. at 124:3-125:22). In or around February 2014, the vehicle would not shut off. SJ Ex. 112 (Mar. 3, 2017 E. Ramirez Dep. at 113:20-114:23; 135:8-12); SJ Ex. 115 (E. Ramirez PFS Q 49, 70 at ELPLNTFF00016852, ELPLNTFF00016856). She took it to two GM dealerships and both turned her away and denied responsibility. SJ Ex. 115 (E. Ramirez PFS Q 75 at ELPLNTFF00016856). Ms. Ramirez had the ignition switch replaced

in February 2014 for \$200 out-of-pocket at Mobile Lock and Key Services just about a month before GM issued the ignition switch recall and she received the recall notice. SJ Ex. 112 (Mar. 3, 2017 E. Ramirez Dep. at 135:8-12); SJ Ex. 115 (E. Ramirez PFS Q 45 at ELPLNTFF00016852); SJ Ex. 116 (ELPLNTFF00009956). She believes the ignition switch defect may be the cause of these issues with her vehicle. SJ Ex. 112 (Mar. 3, 2017 E. Ramirez Dep. at 116:18-118:6; 119:13-23).

391. On April 15, 2017, Ms. Ramirez had the ignition switch recall repair conducted on her vehicle at Martin GMC. SJ Ex. 115 (E. Ramirez PFS Q 45 at ELPLNTFF00016852); SJ Ex. 117 (ELPLNTFF00016820-821).

392. Ms. Ramirez stopped driving the car on the freeway after she learned about the severity of the recall. SJ Ex. 115 (E. Ramirez PFS Q 38 at ELPLNTFF00016850).

393. Ms. Ramirez learned about Old GM's bankruptcy in 2013 or 2014. SJ Ex. 112 (Mar. 3, 2017 E. Ramirez Dep. at 188:8-22).

394. Ms. Ramirez would not have purchased the car if she had known it was defective. *Id.* at 53:23-54:9; 89:15-19; 215:9-216:2; 222:10-225:20.

395. Ms. Ramirez is relying on expert analysis and opinion to prove her damages. SJ Ex. 115 (E. Ramirez PFS Q 424, 430 at ELPLNTFF00016894-895). Ms. Ramirez took out a loan from her 401k to pay for vehicle repairs. SJ Ex. 115 (E. Ramirez PFS Q 424 at ELPLNTFF00016894); SJ Ex. 118 (ELPLNTFF00009925); SJ Ex. 119 (ELPLNTFF00016822).

12. William Rukeyser

396. William Rukeyser purchased a new 2008 Chevrolet Cobalt, subject to Recall No. 14v047, in Lodi, California on September 4, 2008. SJ Ex. 120 (ELPLNTFF00009144-146); SJ Ex. 121 (ELPLNTFF00009199-201).

397. Mr. Rukeyser was looking for a safe and reliable car, which includes a vehicle that “isn’t going to fail suddenly when it’s being driven” and “that offers reasonable crash protection if you are involved in a collision.” SJ Ex. 122 (Mar. 17, 2017 W. Rukeyser Dep. at 86:9-24). He considered GM advertising suggesting the car was safe and reliable in purchasing the vehicle. *Id.* at 83:18-84:4. The information Mr. Rukeyser got from GM at the time of purchase was that “Cobalts as a group were reliable, safe, dependable vehicles...” *Id.* at 88:4-13. Mr. Rukeyser visited the Chevy website before purchasing his vehicle and “the overall impact that [he] got from the website was that this was a reliable, safe vehicle for families, that it had decent gas mileage, and that it was a --basically a good family investment.” *Id.* at 90:13-91:3; 189:23-190:14. Before he purchased his vehicle, Mr. Rukeyser saw GM ads relating to the 2008 Cobalt that said the Cobalt was a good, solid, reliable, safe family vehicle, and these ads influenced his decision to buy the car. *Id.* at 159:7-12; 162:6-12; 163:1-4. Mr. Rukeyser testified that the GM ads’ “claims to safety and reliability were proven to be untruthful” because “there was a potentially fatal defect built into the car” and “clearly the car was neither safe, nor reliable.” *Id.* at 163:5-16.

398. Mr. Rukeyser’s vehicle has stalled while driving, and while he cannot connect the stalls with the ignition switch defect because he “is not an expert,” he is not “ruling it out.” *Id.* at 123:3-125:7.

399. In 2014, his vehicle had the ignition switch recall repair conducted. *Id.* at 114:18-20.

400. Mr. Rukeyser and his wife stopped driving the vehicle with his children and grandchildren in it after they learned about the recall because it was unsafe, specifically because “the defect could cause injury or death to the driver and passengers.” *Id.* at 23:17-26:15. Since

the recall repair, he has reduced his usage of the Cobalt, testifying, “I have used it as a second choice vehicle, if I am considering taking a longer drive, I would tend to go with the -- the vehicle which is safer.” *Id.* at 115:8-19.

401. Mr. Rukeyser learned about the Old GM bankruptcy from “contemporaneous news reports.” *Id.* at 187:6-18.

402. Mr. Rukeyser testified, “it became well known that General Motors had produced a defective vehicle which could have had calamitous or even fatal effects on me or my family members,” and “common sense told me that the vehicle was consequently either overpriced and/or –had not retained a resale price.” *Id.* at 141:4-13. Mr. Rukeyser believes he was damaged because “I was sold a car that was dramatically less safe and reliable than was represented to me, and so depending on how you view it, I was sold that car at either a an inflated price or the car subsequent to the defects becoming known was—would command a dramatically lesser price,” and that had he known about the ignition switch defect he would not have purchased the vehicle and he “would not have subjected [his] family to danger.” *Id.* at 180:22-181:9. Mr. Rukeyser also testified, “[i]f I was aware of the defect, the potentially fatal defect, there would have been no right price for me. I would not have bought the vehicle under any circumstances.” *Id.* at 191:6-13.

403. Mr. Rukeyser is relying on expert analysis and opinion to prove his damages. SJ Ex. 123 (W. Rukeyser PFS Q 424, 430 at ELPLNTFF00011688-689).

13. Michelle Thomas

404. Michelle Thomas purchased a used 2005 Buick LaCrosse, subject to Recall No. 14v355, in El Cerrito, California on December 9, 2010. SJ Ex. 124 (Mar. 21, 2017 M. Thomas Dep. at 12:7-12; 32:4-12); SJ Ex. 125 (GM-MDL2543-305146989-990); SJ Ex. 126 (GM-MDL2543-107201829).

405. Before buying the LaCrosse, Ms. Thomas was looking for a safe, reliable car. SJ Ex. 124 (Mar. 21, 2017 M. Thomas Dep. at 46:24-47:15). She purchased the vehicle because she saw promotional materials and advertisements that indicated the car was safe and reliable, among other things. *Id.* at 36:12-37:4.

406. When Ms. Thomas first went to the dealership to check out the LaCrosse, the salesman gave her the CarFax and told her “there’s no issues with the car, everything’s clean on the car, and that [she] shouldn’t have any problems.” *Id.* at 85:2-11. Ms. Thomas reviewed the CarFax and determined that it did not have any issues. *Id.* at 50:3-21. During both of her test drives she testified, “everything seemed to work okay.” *Id.* at 51:9-17; 52:14-22. Ms. Thomas also bought the car because the salesman did not mention any recalls on the car. *Id.* at 86:23-87:1.

407. From 2007 on, Ms. Thomas viewed email advertisements regarding the vehicle’s reliability and safety ratings, which made her feel comfortable buying it. *Id.* at 74:19-75:17. Ms. Thomas received mailings from Team Chevy regarding Buick vehicles stating that the cars were reliable and safe. *Id.* at 76:14-77:7. Ms. Thomas saw Buick advertisements and commercials communicating their safety ratings. *Id.* at 81:18-82:10. Ms. Thomas relied on all of these advertisements in buying her car. *Id.* at 36:12-37:4; 86:18-22.

408. Ms. Thomas recalls that the ignition switch recall repair was conducted on her vehicle in December 2014. *Id.* at 152:18-154:20. GM’s records are ambiguous as to whether GM conducted the recall repair in June 2015 or in July 2015. *Compare* SJ Ex. 126 (GM-MDL2543-107201829-834) *with* SJ Ex. 127 (GM-MDL2543-107201824-828).

409. Between May and June 2015, Ms. Thomas experienced three instances where she turned her car on, and as it began to move, the car shutoff. SJ Ex. 124 (Mar. 21, 2017 M.

Thomas Dep. at 94:20-95:20; 138:1-4). Often, the trouble with the key and the ignition occurred before and/or after the car started and then shutdown. SJ Ex. 128 (M. Thomas PFS Q 70, 100, 130 at ELPLNTFF00017067, 17072, 17078). Between May and June 2015, Ms. Thomas also experienced approximately twenty instances “where the car would not start and the ignition wouldn’t move to start.” SJ Ex. 124 (Mar. 21, 2017 M. Thomas Dep. at 94:20-95:20).

410. On July 1, 2015, Ms. Thomas spent \$312.57 out-of-pocket to repair her ignition at a GM dealership. SJ Ex. 127 (GM-MDL2543-107201824-828).

411. Ms. Thomas bought a \$118 bus pass for May and June 2015, \$236 total because her vehicle was unreliable due to the ignition switch issues. SJ Ex. 128 (M. Thomas PFS Q 424 at ELPLNTFF00017112). Finally, Ms. Thomas missed about three days of work, which equates to \$600, in dealing with the ignition problems. *Id.*

412. Ms. Thomas would not have purchased the vehicle if she had known about the ignition switch defect, regardless of price. SJ Ex. 124 (Mar. 21, 2017 M. Thomas Dep. at 70:14-71:1; 136:24-137:2; 157:14-158:3; 163:12-165:12).

413. Ms. Thomas is relying on expert analysis and opinion to prove her damages. SJ Ex. 128 (M. Thomas PFS Q 424, 430 at ELPLNTFF00017112-113).

B. Missouri Plaintiffs

1. Brad Akers

414. Brad Akers purchased a new 2009 Chevrolet HHR, subject to Recall Nos. 14v047 and 14v153, in Farmington, Missouri sometime between September and November 2009. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 7:22-24; 36:7-12; 39:10-13); SJ Ex. 130 (GM-MDL2543-305147009-011); SJ Ex. 131 (GM-MDL2543-305120158).

415. Mr. Akers purchased the vehicle because he needed something that could accommodate transporting his grandmother given her previous knee and hip replacements. SJ

Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 49:20-50:5; 51:8-17; 51:23-54:12). Another reason he purchased the vehicle was because the GM salesman touted its safety features after Akers told him he was looking for something safe because he was in a life-threatening car accident his senior year of high school. *Id.* at 50:6-13; 51:8-17; 51:23-54:12. The GM dealership salesman told Mr. Akers that the HHR had better safety features in comparison to another vehicle Mr. Akers was considering, the Kia Sportage. *Id.* at 49:20-50:21; 52:4-54:12. In summer 2009, Mr. Akers also saw a print advertisement discussing the HHR's safety features as better compared to other vehicles. *Id.* at 49:20-50:21; 55:10-56:8.

416. Between July and December 2013, Mr. Akers experienced one shutdown event while driving his car. *Id.* at 129:23-131:7; 133:4-21; SJ Ex. 132 (B. Akers PFS Q 50-79 at ELPLNTFF00013420-424). Mr. Akers also experienced 30 to 50 instances where his key would get stuck in the ignition. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 132:24-133:21); SJ Ex. 132 (B. Akers PFS Q 80-108 at ELPLNTFF00013424-428).

417. Between August or September 2013 and January 2014, Mr. Akers experienced three power steering failures while driving his car. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 107:4-11); SJ Ex. 132 (B. Akers PFS Q 44 at ELPLNTFF00013418-419). The first incident occurred in August or September 2013. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 107:9-109:16); SJ Ex. 132 (B. Akers PFS Q 44 at ELPLNTFF00013418-419). The second incident occurred on Thanksgiving weekend in 2013. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 113:7-116:13); SJ Ex. 132 (B. Akers PFS Q 44 at ELPLNTFF00013418-419). The third incident occurred between Christmas 2013 and New Year's Day 2014, and caused him to run into a ditch, damaging his fender. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 119:5-123:1); SJ Ex. 132 (B.

Akers PFS Q 44 at ELPLNTFF00013418-419). He did not have the damage repaired because of the cost of his deductible. SJ Ex. 132 (B. Akers PFS Q 44 at ELPLNTFF00013418-419).

418. In June 2014, Mr. Akers called and complained to GM customer service about the ignition switch recall and the power steering incident from December 2013 for which he paid out-of-pocket for repairs. SJ Ex. 133 (GM-MDL2543-105195233-235); SJ Ex. 134 (GM-MDL2543-105195247-263).

419. Between June and August 2014, both recall repairs were conducted on his vehicle. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 84:21-25).

420. Mr. Akers missed nine to twelve days of work at \$60 per day, after taxes, because he had to travel long distances to various GM dealerships and/or rental car agencies to deal with the ignition switch and power steering defects, the repairs, and the rental car. *Id.* at 156:18-157:19; SJ Ex. 132 (B. Akers PFS Q 424, 425 at ELPLNTFF00013455). He testified, “I did have costs associated with the vehicle because I had to drive 130 to 140 mile round trip weekly to re-sign a contract which most of the time meant that I missed work. And they wouldn’t like literally give it to me and let me keep it the full amount of time. I had to go back once a week and renew a contract at the car rental place. I believe it was on Sapaugh’s lot or maybe affiliated with them. I believe it might have been an Enterprise.” SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 89:5-90:2; 126:16-127:6).

421. Mr. Akers paid \$200-\$230 for a rental car at some point during the recalls, and this was not for the complimentary rental car provided to him by the dealership. *Id.* at 156:6-17.

422. Mr. Akers paid his girlfriend \$130 and his aunt \$80 to use and gas up their cars at various times because of the defect manifestation. *Id.* at 112:22-113:2; 118:10-13; 120:16-20; 126:16-127:6; 157:20-158:19; SJ Ex. 132 (B. Akers PFS Q 424, 425 at ELPLNTFF00013455).

423. Mr. Akers spent \$279.12 to repair the vehicle's power steering just a few months before GM finally issued the power steering recall, and GM has not reimbursed him for those costs despite his efforts to obtain repayment. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 159:2-22); SJ Ex. 135 (ELPLNTFF00013405); SJ Ex. 133 (GM-MDL2543-105195233-235); SJ Ex. 134 (GM-MDL2543-105195247-263).

424. Mr. Akers suffered economic damage from the third power steering failure incident in which his vehicle crashed into a ditch and was damaged. SJ Ex. 129 (Mar. 23, 2017 B. Akers Dep. at 124:24-126:4).

425. Mr. Akers heard about the Old GM bankruptcy on the news "some time back" when it happened, but he couldn't recall the year. *Id.* at 8:7-21; 205:13-23. He understands there is a date by which a creditor has to file a claim in bankruptcy, but he did not know there was a bar date for claims against Old GM in its bankruptcy. *Id.* at 208:4-17. Mr. Akers also testified, "[a]nd I do understand that there are times that old debts are forgiven, but again, if there was fraudulent activity before the bankruptcy that was not made aware of, then to me I think the bankruptcy, the new company possibly may take on some old debts or old assets -- or I don't want to say that -- old fees or responsibilities that they should make good. If it was a fraudulent knowing something like, say like a recall, years ahead of time before the bankruptcy ever took place if they knew that they were selling defective products -- and I'm just saying if, but if they did knowingly sell millions of defective recalled -- things that needed to be recalled, then that needed to be fixed or rectified before the bankruptcy was granted." *Id.* at 206:5-20.

426. Mr. Akers would not have purchased the car if he knew about the recalls, saying, "I feel like the value was overpriced due to the issues that I had with the car and those issues not being disclosed to me when I bought the car," and "I definitely would not have paid the price for

that particular car had I known I was going to have those issues, and I really feel like that, you know, somebody done some covering up somewhere with that information.” *Id.* at 73:13-74:14; *see also* 78:21-79:17; 199:7-14.

427. Mr. Akers is relying on expert analysis and opinion to prove his damages. SJ Ex. 132 (B. Akers PFS Q 424, 430 at ELPLNTFF00013455-456).

2. Deloris Hamilton

428. Deloris Hamilton purchased a used 2000 Oldsmobile Alero, subject to Recall No. 14v400, in St. Charles, Missouri in on February 24, 2012. SJ Ex. 136 (Mar. 13, 2017 D. Hamilton Dep. at 25:17-19; 34:5-8); SJ Ex. 137 (GM-MDL2543-305135822-823); SJ Ex. 138 (D. Hamilton PFS Q 25-31 at ELPLNTFF00016653).

429. Ms. Hamilton bought her vehicle because she thought it was safe and in good mechanical condition. SJ Ex. 136 (Mar. 13, 2017 D. Hamilton Dep. at 89:11-14; 89:18-90:2; 90:5-7; 90:23-91:2).

430. If she had known that her vehicle had the ignition defect, Ms. Hamilton never would have paid what she paid for it. *Id.* at 124:14-19; 161:8-11. Ms. Hamilton would not have purchased her vehicle if GM had told her it had a safety defect in it that could injure or kill her. *Id.* at 161:4-7. Ms. Hamilton would not have purchased her vehicle if she knew about GM’s bad practices regarding safety and/or about the ignition switch defect. *Id.* at 161:13-164:3.

431. Ms. Hamilton is relying on expert analysis and opinion to prove her damages. SJ Ex. 138 (D. Hamilton PFS Q 424, 430 at ELPLNTFF00016697).

3. Cynthia Hawkins

432. Cynthia Hawkins purchased a used 2010 Chevrolet Cobalt, subject to Recall Nos. 14v047 and 14v153, in Weldon Spring, Missouri on July 23, 2013. SJ Ex. 139 (Mar. 24, 2017 C.

Hawkins Dep. at 7:25-8:2; 27:1-5); SJ Ex. 140 (ELPLNTFF00008126); SJ Ex. 141 (ELPLNTFF00008129); SJ Ex. 142 (GM-MDL2543-304722462).

433. Before she bought the Cobalt, Ms. Hawkins was “looking for a family car that [her daughter] would be safe driving in and that [her daughter] could -- we could share.” SJ Ex. 139 (Mar. 24, 2017 C. Hawkins Dep. at 30:24-31:4). Ms. Hawkins told the salesman they were looking for a “family-oriented car.” *Id.* at 35:13-17. Ms. Hawkins testified, “When we found this car, it had -- you know, it was something that would fit into our family budget and something that I considered a family safe car.” *Id.* at 32:6-14.

434. Routine service for the vehicle was performed at the O’Fallon Chevy dealership. SJ Ex. 143 (C. Hawkins PFS Q 43 at ELPLNTFF00016718).

435. In April 2014, both recall repairs were conducted on her vehicle. SJ Ex. 139 (Mar. 24, 2017 C. Hawkins Dep. at 82:4-16); SJ Ex. 142 (GM-MDL2543-304722462).

436. Before the recall, Ms. Hawkins teenaged daughter drove the car to work and school when Ms. Hawkins wasn’t using it. SJ Ex. 139 (Mar. 24, 2017 C. Hawkins Dep. at 15:2-9; 16:2-5; 29:19-24; 30:24-31:4). After the recall repair, her daughter drove it very little because Ms. Hawkins had to buy her another vehicle to drive. *Id.* at 13:19-21; 15:2-9; 15:24-17:3; 29:19-24. Ms. Hawkins spent \$3,000 on a used vehicle for her daughter to drive to work and school because her daughter was not permitted to drive the rental vehicle she had while the Cobalt was awaiting repair. *Id.* at 70:12-71:24; SJ Ex. 143 (C. Hawkins PFS Q 424 at ELPLNTFF00016760). Ms. Hawkins did not plan to purchase this other vehicle for her daughter until the Cobalt recall was announced. SJ Ex. 139 (Mar. 24, 2017 C. Hawkins Dep. at 76:13-17). Ms. Hawkins incurred increased fuel costs due to the ignition switch recall because the used

vehicle she purchased for her daughter to use was older and received worse gas mileage than the Cobalt. *Id.* at 75:12-76:12; SJ Ex. 143 (C. Hawkins PFS Q 424, 425 at ELPLNTFF00016760).

437. Ms. Hawkins had to use a rental vehicle for approximately six months because GM did not yet have the parts to repair her Cobalt. SJ Ex. 139 (Mar. 24, 2017 C. Hawkins Dep. at 49:17-51:1); SJ Ex. 144 (GM-MDL2543-101183711). The GM dealership would not permit her to keep the Cobalt there while it awaited repair so she had to let it sit in the parking lot at her workplace for approximately six months. SJ Ex. 139 (Mar. 24, 2017 C. Hawkins Dep. at 50:7-52:18). Ms. Hawkins incurred repair costs for the Cobalt, \$400 for new tires and \$300 for new brakes, because it sat so long without use while awaiting the recall parts. *Id.* at 59:13-61:12.

438. When asked why she wanted to be a class rep, Ms. Hawkins testified, “When I first decided is when it was – it’s the whole principle of the point. That is the reason why. I decided it was important that when you have something and no one knows that there was a problem with something and you didn’t know until it was like secondhand news, I like -- I would have liked to have known beforehand before I purchased the car or beforehand when something happens, when you have a major recall like that. I felt at loss. I felt not powered that I didn’t make a difference, that something could have happened to my family and I’m responsible for them. And when I decided to go this route, it’s because it’s the principle.” *Id.* at 91:1-16.

439. Ms. Hawkins believes she paid more for the vehicle than she should have, and she would not have purchased it had the defect been disclosed to her. *Id.* at 105:15-20; 111:12-114:18.

440. Ms. Hawkins is relying on expert analysis and opinion to prove her damages. SJ Ex. 143 (C. Hawkins PFS Q 424, 430 at ELPLNTFF00016760-761).

4. Kenneth Robinson

441. Kenneth Robinson purchased a new 2008 Pontiac G5, subject to Recall No. 14v047, in Excelsior Springs, Missouri on September 7, 2008. SJ Ex. 145 (May 9, 2017 K. Robinson Dep. at 8:3-9; 34:21-25; 42:6-8; 64:22-65:21); SJ Ex. 146 (GM-MDL2543-305118315).

442. In purchasing the car, Mr. Robinson was looking for a safe and fuel-efficient vehicle. SJ Ex. 145 (May 9, 2017 K. Robinson Dep. at 40:17-20; 44:3-7). He wanted the best safety features there were, and he was particularly concerned with the airbags and brakes. *Id.* at 44:8-16. The GM dealership salesman told him about the vehicle's safety features, and said "[i]t is a great car, a lot of safety features on it, the air bags, the braking, the steering, gas mileage was great." *Id.* at 40:4-16; 44:17-24; 56:24-57:2.

443. Within the first three months of owning the vehicle, Mr. Robinson began experiencing frequent shutdown events while driving the car. *Id.* at 66:22-72:13; SJ Ex. 147 (K. Robinson PFS Q 49-108 at ELPLNTFF00016904-914). Mr. Robinson repeatedly brought the car in to the Westfall O'Dell GM dealership to try to remedy the reoccurring shutdowns, but they could not recreate the problem. SJ Ex. 145 (May 9, 2017 K. Robinson Dep. at 69:23-70:20; 72:14-73:16; 134:14-135:3); SJ Ex. 147 (K. Robinson PFS Q 43 at ELPLNTFF00016903).

444. GM's records show the ignition switch was replaced in April 2013. SJ Ex. 146 (GM-MDL2543-305118316, 305118322, 305118335 to 305118337). In May 2013, Mr. Robinson traded the vehicle in to the Jim Falk GM dealership. SJ Ex. 145 (May 9, 2017 K. Robinson Dep. at 83:5-7; 97:5-11; 102:16-19). When he traded it in, the GM dealership salesman offered Mr. Robinson less for the trade-in because the salesman said there were known problems with that model and it would be harder to sell. *Id.* at 94:9-95:5; 99:22-101:9; 101:23-102:12; SJ Ex. 147 (K. Robinson PFS Q 428 at ELPLNTFF00016948). In August 2014, the

vehicle's ignition switch was replaced again, this time under the recall, after Mr. Robinson no longer owned it. SJ Ex. 146 (GM-MDL2543-305118316, 305118321, 305118326-331).

445. Mr. Robinson was not aware of Old GM's bankruptcy. SJ Ex. 145 (May 9, 2017 K. Robinson Dep. at 8:16-9:2; 137:2-15).

446. Mr. Robinson would not have purchased the vehicle or given the money he paid for it had he known it was defective. *Id.* at 38:15-24; 138:22-139:2; 139:24-140:7. He would not have purchased it if he knew it had a defect in it that could potentially injure or kill him. *Id.* at 138:22-139:2; 139:24-140:7.

447. Mr. Robinson is relying on expert analysis and opinion to prove his damages. SJ Ex. 147 (K. Robinson PFS Q 424, 430 at ELPLNTFF00016948-949).

5. Ronald Robinson

448. Ronald Robinson purchased a used 2010 Chevrolet Impala, subject to Recall No. 14v355, in St. Louis, Missouri on June 30, 2011. SJ Ex. 148 (Mar. 21, 2017 R. Robinson Dep. at 10:11-13; 42:12-18); SJ Ex. 149 (ELPLNTFF00008162-165); SJ Ex. 150 (GM-MDL2543-305146970-971).

449. Safety and price were both important to Mr. Robinson in purchasing the vehicle, and he testified, "at the time of purchase I assumed that it was a reliable, safe vehicle." SJ Ex. 148 (Mar. 21, 2017 R. Robinson Dep. at 107:8-108:11; 110:3-17; 118:23-119:2).

450. Mr. Robinson was attracted to the vehicle "because of the advertisement of seeing the GM products; the price looked decent." *Id.* at 55:23-56:2. Mr. Robinson testified that he "viewed e-mail advertising highlighting the quality of the GM product and that positively impacted [his] decision to buy the car." *Id.* at 33:22-34:2; SJ Ex. 151 (R. Robinson PFS Q 433 at ELPLNTFF00017001). Mr. Robinson saw GM television commercials representing that GM made good products and that GM stands behind its products, and while he thought these

statements were true at the time, he no longer does. SJ Ex. 148 (Mar. 21, 2017 R. Robinson Dep. at 62:5-21; 63:6-11). He believes these GM commercials were false with regard to the quality of the GM product. *Id.* at 62:22-63:5; 64:9-14; 67:17-68:3; 133:22-134:22. These ads made him feel comfortable buying the Impala. *Id.* at 64:5-8. When asked whether he could point to specific GM advertisements with untruthful statements, Mr. Robinson testified, “they’re speaking about how safe the cars are, putting the consumer first, and from all that I’ve read, I don’t see that as being truthful.” *Id.* at 141:14-23.

451. In June 2014, Mr. Robinson called GM customer service to ask whether his vehicle was involved in any recall and they told him “no.” SJ Ex. 152 (GM-MDL2543-101185872-879); SJ Ex. 153 (GM-MDL2543-101185870-871); SJ Ex. 148 (Mar. 21, 2017 R. Robinson Dep. at 31:20-32:21).

452. In November 2014, the recall repair was conducted on his vehicle. SJ Ex. 148 (Mar. 21, 2017 R. Robinson Dep. at 74:1-10).

453. On December 7, 2012, Mr. Robinson paid \$200 to have an oil leak and his vehicle’s transmission cooler lines repaired at Weber Chevrolet. SJ Ex. 154 (ELPLNTFF00008157-158). On December 4, 2015, Mr. Robinson paid \$200.00 to have his vehicle’s front wheel bearing repaired and hub replaced at Weber Chevrolet. SJ Ex. 155 (ELPLNTFF00008153). On September 10, 2014, Mr. Robinson paid \$196.85 to have a faulty actuator repaired in his vehicle at Weber Chevrolet. SJ Ex. 156 (ELPLNTFF00008154). On July 22, 2015, Mr. Robinson paid \$41.06 for an oil change at Weber Chevrolet. SJ Ex. 157 (ELPLNTFF00009829-830).

454. Mr. Robinson testified he “would not have purchased this GM-branded vehicle had he known about these defects, and under no circumstances would he have even considered

buying the car for a lesser price.” SJ Ex. 148 (Mar. 21, 2017 R. Robinson Dep. at 31:12-32:5). He also testified, “[b]ased on the recall, I felt that the price that I paid for the car was inflated. It ought to have been a lot less than what I paid for the car,” and “I would be hard-pressed to give you a hard number, but definitely not the price that I paid for it.” *Id.* at 79:23-80:15.

455. Mr. Robinson is relying on expert analysis and opinion to prove his damages. SJ Ex. 151 (R. Robinson PFS Q 424, 430 at ELPLNTFF00016999-17000).

6. Mario Stefano

456. Mario Stefano purchased a certified pre-owned 2011 Chevrolet Camaro, subject to Recall No. 14v346, in St. Louis, Missouri on May 14, 2013. SJ Ex. 158 (Apr. 14, 2017 M. Stefano Dep. at 8:18-24; 40:6-13; 43:16-44:1); SJ Ex. 159 (ELPLNTFF00013479); SJ Ex. 160 (ELPLNTFF00006115-11); SJ Ex. 161 (GM-MDL2543-305119621).

457. Mr. Stefano purchased the vehicle “[b]ecause it is a vehicle that my wife and I enjoy. We’ve always enjoyed Camaros. It was everything that she wanted in a car, we thought, and the dealership is somewhere that we frequent for buying our vehicles.” SJ Ex. 158 (Apr. 14, 2017 M. Stefano Dep. at 55:18-24). Mr. Stefano’s prior GM patronage and experience influenced his expectation for the vehicle, testifying, “[i]t should be a quality product. We’ve always had good products from you guys before -- not you in particular but from the company, but now we’re looking at our car is not the quality that we’ve always come to expect when we bought those.” *Id.* at 29:6-30:14. With regard to purchasing the vehicle certified pre-owned, Mr. Stefano testified, “you walk into the dealer and they give you that paper that says it’s certified and we’ve looked at it and we’ve hired a mechanic that has gone through schooling and been taught to look at everything, and this vehicle is perfect but it’s not. So shouldn’t a -- I don’t know if I can ask you that, but I mean to me I think that when you fill out a sheet that says that this vehicle is certified and it’s just like new again, that vehicle should be just like new again.

That's them standing behind their vehicle." *Id.* at 62:24-63:14. With regard to the safety features he was looking for, Mr. Stefano testified, "[t]he Camaro is a very safe-built car, you know. It's got a solid body to it, and the build of the frame is almost looks like a roll cage in there, you know. So it's got good safety ratings from what I understand." *Id.* at 60:9-15.

458. Mr. Stefano serviced the vehicle himself, but he did have warranty and recall repairs performed at GM dealerships. SJ Ex. 162 (ELPLNTFF00013475-478).

459. In September 2014, the recall repair was conducted on his Camaro. SJ Ex. 161 (GM-MDL2543-305119622).

460. Mr. Stefano experienced one incident where he lost power while driving, but he does not recall when it happened and whether it was before or after the recall repair. SJ Ex. 158 (Apr. 14, 2017 M. Stefano Dep. at 52:18-53:4; 92:8-93:9).

461. Mr. Stefano would not have purchased the Camaro if he knew it had a dangerous safety defect. *Id.* at 133:25-134:5. Mr. Stefano would not have paid the same price for his vehicle if GM had told him about the dangerous safety defect. *Id.* at 134:6-10.

462. Mr. Stefano is relying on expert analysis and opinion to prove his damages. SJ Ex. 163 (M. Stefano PFS Q 424, 430 at ELPLNTFF00013521-522).

7. Christopher Tinen

463. Christopher Tinen purchased a new 2010 GMC Acadia, subject to Recall No. 14v118, in Ellisville, Missouri on February 22, 2010. SJ Ex. 164 (Apr. 13, 2017 C. Tinen Dep. at 28:6-15; 28:19-23); SJ Ex. 165 (ELPLNTFF00000032-33); SJ Ex. 166 (GM-MDL2543-305119202).

464. Mr. Tinen was looking for a "safe car, an affordable car, a dependable car." SJ Ex. 164 (Apr. 13, 2017 C. Tinen Dep. at 29:24-30:6). He bought the vehicle because, "[n]umber one I would say was dependability from a -- I can go out and start every day and not have any

questions or concerns, so dependability. Number two, safety. The ratings on the car were touted by this dealer and other to have a great safety record. Third was serviceability.” *Id.* at 40:11-18.

465. Mr. Tinen reviewed information about the features and benefits of the vehicle on the GM website before purchase. *Id.* at 45:14-46:1. He also reviewed the Acadia brochure. *Id.* at 50:3-13. Mr. Tinen reviewed GM advertisements that influenced his decision to purchase the vehicle, testifying, “[a]t the time I believe there was a TV commercial by General Motors touting dependability and performance.” *Id.* at 117:10-21. These advertisements also reinforced safety as a topic. *Id.* at 118:11-20. Mr. Tinen recalls seeing GM advertisements in 2009 that related to dependability, performance, and safety, testifying, “my feeling the message was by buying American, you’re not only saving jobs, but you have got a dependable, safe car, and we stand behind it as the new GMC or the new GM. There was some reference to the new GM behind it.” *Id.* at 119:12-120:5. Mr. Tinen relied on these GM advertisements. *Id.* at 121:19-20. The GM dealership salesman also told him about the vehicle’s fuel economy, performance, and dependability. *Id.* at 58:16-21.

466. On several occasions the side impact airbag light in his flickered. *Id.* at 97:18-98:3.

467. On April 20, 2012, Mr. Tinen traded-in the vehicle. *Id.* at 66:10-13; 70:23-71:1; SJ Ex. 167 (C. Tinen PFS Q 425 at ELPLNTFF00017164). He testified, “I felt I had no negotiating, that I at this point had a lemon on my hands, and for lack of dependability, lack of performance and safety concerns because of the aspects we’re discussing, felt I had to get rid of the car. I felt I had no negotiating with the dealer. I felt backed into a corner because the other dealers were not interested.” *Id.* at 73:12-74:3.

468. Mr. Tinen would not have purchased the vehicle if he knew it had a dangerous safety defect. *Id.* at 140:12-15. He would not have paid the same price for his vehicle if GM had told him about the dangerous safety defect. *Id.* at 140:16-20.

469. Mr. Tinen is relying on expert analysis and opinion to prove his damages. SJ Ex. 167 (C. Tinen PFS Q 424, 430 at ELPLNTFF00017164-165).

8. Patrice Witherspoon

470. Patrice Witherspoon purchased a new 2006 Saturn Ion, subject to Recall Nos. 14v047 and 14v153, in Blue Springs, Missouri on November 7, 2005. SJ Ex. 168 (May 31, 2017 P. Witherspoon Dep. at 14:18-19; 89:1-4); SJ Ex. 169 (ELPLNTFF00009322); SJ Ex. 170 (GM-MDL2543-305118726); SJ Ex. 171 (GM-MDL2543-305154066-070).

471. Ms. Witherspoon testified, “I was looking for a larger vehicle for me and my minor daughter, a four door. I was also looking for a US vehicle due to the parts. I figured that would be easier if I had to get a part serviced if it was an American-made, US vehicle. I was also looking for safe and reliable vehicle to get to and from work and to transport my daughter to and from school, as well as her various activities such as dance.” SJ Ex. 168 (May 31, 2017 P. Witherspoon Dep. at 86:17-87:5).

472. Ms. Witherspoon testified, “[it] was mostly the advertisements that were running at the time about the Saturn made me look into Saturn, and then also I did comparisons to other four-door vehicles in terms of cost. This was going to be my first vehicle, so I did a lot of research to narrow it down to the Saturn.” *Id.* at 87:8-17. Ms. Witherspoon testified that she “reviewed GM’s Web page and other Internet websites discussing the Saturn ION prior to her purchase and believed that the vehicle was safe and reliable based on her review,” and she “believed her vehicle was safe and defect-free when she purchased it.” *Id.* at 45:22-46:7. When she visited GM’s website before buying the car, she testified that she “[l]ooked to see what they

said in terms of safety and I think like stars that they gave a certain vehicle.” *Id.* at 103:13-16. She believes the GM website statements that the vehicle was safe and reliable were untrue. *Id.* at 46:8-24.

473. Ms. Witherspoon also saw Saturn television advertisements that stated its vehicles were safe. *Id.* at 54:4-11. She testified, “I remember a specific commercial where it showed the Saturn ION and it had different things like hitting the vehicle, like a baseball bat, shopping cart ran into it. It was just different items. That was the whole gimmick to show that the car would be durable and not be able to cause harm to it easily. That’s the one specific commercial I remember.” *Id.* at 54:19-55:5. She believes this commercial was untrue or misleading “because the implied [sic] is that it’s a safe vehicle and it wasn’t.” *Id.* at 55:6-20.

474. The GM dealership salesman told Ms. Witherspoon that her vehicle was safe and reliable, and he specifically discussed the front airbags with her. *Id.* at 60:5-21. She believes the car was not in fact safe and reliable because of the defects in the car and “[b]ecause the vehicle would turn off while driving. That was potentially deadly. Also, the vehicle you couldn’t steer if it were to shut off, which is potentially deadly,” and “I feel also the fact that I repetitively brought the vehicle in complaining of those issues and nothing was done timely also was unsafe.” *Id.* at 61:3-62:9.

475. Ms. Witherspoon’s vehicle shut off on several occasions while she was driving. *Id.* at 62:18-63:16.

476. GM records show that the GM dealership repaired her vehicle in November 2011 under the same field action/tech bulletin for a power steering defect No. 10187 that GM eventually sent her a recall notice about in June 2012. SJ Ex. 172 (GM-MDL2543-305118727, 305118733); SJ Ex. 171 (GM-MDL2543-305154066-070); SJ Ex. 173 (ELPLNTFFF00009318).

This recall notice indicated the recall repair was only required if the defect had manifested, which according to Ms. Witherspoon's records, it had. SJ Ex. 173 (ELPLNTFFF00009318); SJ Ex. 171 (GM-MDL2543-305154066-070).

477. In June 2014, the ignition switch recall repair were conducted on Ms. Witherspoon's vehicle, but she testified, "I'm even not aware now whether or not the problem is actually, truly fixed because, like you stated, some people that had the vehicle, it never manifest, so I can only go by what GM has told me now in terms of the repair. I'm not completely aware whether or not that's true or not." SJ Ex. 168 (May 31, 2017 P. Witherspoon Dep. at 115:12-24; 148:21-149:12).

478. GM reimbursed Ms. Witherspoon for two separate out-of-pocket ignition-related repairs conducted at Molle Chevrolet—one from February 6, 2013, and the other from July 15, 2013—after GM announced the ignition switch recall. SJ Ex. 174 (ELPLNTFF00009319); SJ Ex. 175 (ELPLNTFF00015417-420); SJ Ex. 168 (May 31, 2017 P. Witherspoon Dep. at 135:14-23).

479. On or around June 14, 2014, after Molle Chevy told Ms. Witherspoon that the ignition switch part was available, she brought her car in for the recall repair, but after waiting most of the day she was told the part was not available after all and she would have to come back. SJ Ex. 168 (May 31, 2017 P. Witherspoon Dep. at 65:23-66:12). On or around June 21, 2014, she returned to Molle Chevy and waited two hours for the recall repair. *Id.* at 66:21-67:12. Ms. Witherspoon was denied a loaner vehicle while the parts for the ignition switch recall repair were unavailable. *Id.* at 64:8-21.

480. Ms. Witherspoon heard Old GM filed for bankruptcy in the news in 2009. *Id.* at 15:2-7; 154:15-24.

481. Ms. Witherspoon “would not have driven the vehicle or would have sold it if she had known about its defect. She would not have purchased the vehicle or she would have paid less for it had she known about the defect in the vehicle.” *Id.* at 66:21-67:12. She believes she paid too much for the vehicle. *Id.* at 68:7-17. GM did not notify Ms. Witherspoon about the ignition switch defect before she purchased it, and had they done so, she would not have bought it. *Id.* at 156:10-163:13.

482. Ms. Witherspoon is relying on expert analysis and opinion to prove her damages. SJ Ex. 176 (P. Witherspoon PFS Q 424, 430 at ELPLNTFF00012044).

C. Texas Plaintiffs

1. Gareebah Al-ghamdi

483. Gareebah Al-ghamdi purchased a used 2004 Chevrolet Impala, subject to Recall No. 14v400, in San Antonio, Texas on September 7, 2009. SJ Ex. 177 (May 5, 2017 G. Al-ghamdi Dep. at 7:13-15; 20:2-4; 20:21-24); SJ Ex. 178 (GM-MDL2543-305148825).

484. Ms. Al-ghamdi purchased the Impala because she needed “something reliable to get to work and school” because her previous vehicle was no longer working. SJ Ex. 177 (May 5, 2017 G. Al-ghamdi Dep. at 32:13-18; 38:23-24).

485. Ms. Al-ghamdi experienced twenty or more shutdown events while driving her vehicle. *Id.* at 59:8-10. In the May 2012 incident, “[t]he vehicle was off but the key was still in the on position so I turned it *all the way off*,” and “I made sure that the vehicle switch or the ignition was *all the way off* because I didn’t want -- when this happened, I thought maybe the engine -- something was wrong with the engine and I didn’t want to restart the vehicle and run the risk of doing more damage than good.” *Id.* at 61:21-62:4; 63:14-21. Emphasis added. The vehicle immediately started when her stepfather tried restarting it. *Id.* at 65:1-6. Her stepfather inspected it afterward and could find nothing wrong with the car, and she testified, “he didn’t

know why it would shut off like that.” *Id.* at 65:24-66:13. Her stepfather looked at the vehicle again after a 2013 shutdown incident and she testified, “he said he couldn’t find anything wrong with it.” *Id.* at 71:19-72:6. In yet another 2013 shutdown incident, the vehicle shutdown on a freeway access ramp that did not have a shoulder to pull over to and Al-ghamdi testified, “this was probably one of the, I guess, most terrifying events that I experienced, this one in particular, because there was nothing for me to do to secure my safety.” *Id.* at 74:6-75:15. Ms. Al-ghamdi did not know the key position in this and other shutdown incidents because “[w]hen you’re in a position like that and your vehicle loses power, your concern is not what is the position of the vehicle. It’s how do I get out of this situation and how do I get out of it avoiding a collision or possibly losing my life because I’m going so fast and the vehicle just shuts off.” *Id.* at 70:7-10; 80:2-13; 81:20-22. In all of her shutdown incidents, including the May 2012 incident, Ms. Al-ghamdi believes it is possible the key was in the accessory position. *Id.* at 168:21-169:9.

486. Ms. Al-ghamdi’s stepfather made several repairs to the car and on numerous occasions he replaced parts in an attempt to remedy the shutdowns, but nothing worked. *Id.* at 29:3-21. Her stepfather purchased various parts when she began having incidents with the vehicle shutting off, but she testified, “[h]e couldn’t identify why it was happening so he would diagnose it and then he would try to switch things out and repair it and hopefully that would take care of the issue.” *Id.* at 29:7-17. They took it to Advanced Auto Parts several times for diagnosis, but the shop could not identify the shutdown cause either. *Id.* at 139:5-140:12. Ms. Al-ghamdi’s stepfather never determined the ignition switch was the cause of the shutdowns, and she testified, that “[o]nce GM did release that information, it was just kind of like a light bulb, okay, here it is, you know, this has to be the reason.” *Id.* at 102:14-103:4. Ms. Al-Ghamdi paid

an estimated \$3,000 in out-of-pocket costs on troubleshooting repairs in an attempt to remedy the frequent shut down events. *Id.* at 29:3-21; 152:11-17; 158:19-159:14.

487. After a shutdown incident in early summer 2014, Ms. Al-ghamdi decided to buy another vehicle because she felt it was unsafe to continue driving the Impala. *Id.* at 86:10-22; 90:11-13; 157:8-15. In September 2014, she purchased another used vehicle. *Id.* at 40:8-20. During this time in 2014, the recall repair parts were unavailable and Ms. Al-ghamdi testified, “I would have preferred that parts would have been made available when the recall notice that I received in the mail came out, but they weren’t.” *Id.* at 157:3-15.

488. In 2014, Ms. Al-ghamdi tried to sell the Impala to use it as down payment on her next vehicle but the dealerships were not interested because they knew about the ignition switch recall. *Id.* at 118:8-119:11; 119:25-120:14; 121:1-12. These dealerships told her the vehicle was unreliable and a safety hazard because of the defect. *Id.* at 153:20-154:13.

489. At the time she purchased the car, Ms. Al-ghamdi thought she was getting an okay price but only because she was unaware of the defect. *Id.* at 153:11-14. Ms. Al-Ghamdi believes she was damaged because she overpaid for the vehicle and spent money on unnecessary repairs to her car. *Id.* at 152:11-17. She believes she paid a higher price than the vehicle was worth because of the ignition switch defect. *Id.* at 153:7-10. Ms. Al-ghamdi would not have purchased her car had GM told her it had a defect that could potentially injure or kill her, and had she known it had a defect like the ignition switch defect, she would not have purchased it. *Id.* at 169:20-24; 171:4-13. Ms. Al-ghamdi believes GM knew of the defect before it actually issued a recall and before she actually purchased her vehicle, and that it was negligent to not warn owners of the risk to their safety sooner. *Id.* at 128:4-129:10.

490. Ms. Al-Ghamdi is relying on expert analysis and opinion to prove her damages. SJ Ex. 179 (G. Al-ghamdi PFS Q 424, 430 at ELPLNTFF00004749-750).

2. Dawn Bacon

491. Dawn Bacon purchased a used 2006 Cadillac CTS, subject to Recall No. 14v394, in Jacksonville, Texas on January 13, 2013. SJ Ex. 180 (Mar. 28, 2017 D. Bacon Dep. at 9:8-10; 22:15-18; 175:4-10); SJ Ex. 181 (D. Bacon PFS Q 25-31 at ELPLNTFF00014863); SJ Ex. 182 (GM-MDL2543-305132839).

492. Ms. Bacon purchased this vehicle because it was previously her grandmother's and "because it was supposed to be a safe vehicle. And I liked -- I liked the look of the car." SJ Ex. 180 (Mar. 28, 2017 D. Bacon Dep. at 36:15-20).

493. Before she purchased her car, Ms. Bacon saw GM television advertisements that said the CTS was rated first in its class for safety. *Id.* at 30:13-22; 33:21-34:8; 35:7-12; 35:16-25. Ms. Bacon thought about how the CTS was supposed to be safe when she was purchasing the vehicle. *Id.* at 36:5-11. Her former father-in-law, a GM dealership salesman and the man that sold her the vehicle, also told her it was a good, safe car. *Id.* at 30:13-22; 31:19-33:20.

494. Ms. Bacon's car shutoff on her seven or eight times while she was driving it. *Id.* at 61:11-20.

495. In April 2016, Ms. Bacon stopped driving the CTS because of these shutdowns. *Id.* at 20:10-14; 20:24-21:5; 50:8-11. Since then she has driven her boyfriend's truck. *Id.* at 20:15-21.

496. Ms. Bacon cannot recall when she first learned about the ignition switch defect. *Id.* at 160:2-161:21. GM did not mail the ignition switch recall notice to Ms. Bacon until November 2016, while the previous notices were mailed to the car's former owner. SJ Ex. 183 (GM-MDL2543-305148958-964).

497. Ms. Bacon tried to sell the vehicle to a few dealerships and they were not interested because of the recalls associated with the vehicle. SJ Ex. 180 (Mar. 28, 2017 D. Bacon Dep. at 107:17-108:22; 110:20-111:25).

498. Ms. Bacon is keeping the CTS for now because she is waiting to sell it for a fair price and because she does not want to put anyone else at risk with the car as she does not feel it is safe to sell. *Id.* at 21:6-12; 107:9-16; 114:25-115:4. When asked, “[w]ould you agree with me that if the recall repair is designed to address the situation with the ignition switch that once it is done, that would no longer be a safety concern of the vehicle?” Ms. Bacon responded, “I don’t know if that’s true or not. I don’t know that.” *Id.* at 150:7-14.

499. Ms. Bacon would not have purchased her car had GM told her it had a defect that could potentially injure or kill her, and had she known her vehicle had a defect like the ignition switch defect, she would not have purchased it. *Id.* at 180:3-8; 181:24-182:8. Ms. Bacon believes she overpaid for the car “[b]ecause it’s defective. Because it’s not safe and it -- safety. Being safe is priceless. The older you get, the more you -- you realize how priceless safety is.” *Id.* at 148:4-10.

500. Ms. Bacon is relying on expert analysis and opinion to prove her damages. SJ Ex. 181 (D. Bacon PFS Q 424, 430 at ELPLNTFF00014902).

3. Dawn Fuller

501. Dawn Fuller purchased a used 2008 Chevrolet Impala, subject to Recall No. 14v355, in Fort Worth, Texas on December 17, 2011. SJ Ex. 184 (Nov. 20, 2017 D. Fuller Dep. at 9:7-11; 30:9-18); SJ Ex. 185 (ELPLNTFF00015725); SJ Ex. 186 (ELPLNTFF00015713-714); SJ Ex. 187 (GM-MDL2543-402676139).

502. Ms. Fuller purchased her vehicle in part because safety and reliability were important to her. SJ Ex. 184 (Nov. 20, 2017 D. Fuller Dep. at 33:9-16).

503. Ms. Fuller purchased the Impala after her previous car was totaled in an accident, and up until she bought the Impala she was using a rental or relying on rides from others. *Id.* at 77:17-23; 78:12-17; 79:19-22. She purchased the Impala so she could get to work. *Id.* at 79:23-80:12. This is the only vehicle for Ms. Fuller and her kids to share. *Id.* at 93:15-94:4. Although Ms. Fuller testified the vehicle had 79,630 miles on it when she purchased it, GM's documents state the vehicle had 60,400 miles on it when the GM dealership conducted the recall repair on September 17, 2016. SJ Ex. 189 (D. Fuller PFS Q 30 at ELPLNTFF00016600); SJ Ex. 188 (GM-MDL2543-402676145).

504. Ms. Fuller experienced ten to fifteen incidents she described as: "I would put the key in the ignition and try to turn it, but it wouldn't turn. And the steering column felt locked up, and the wheel wouldn't turn. Each time I would take the key out and wait and try again. And eventually it would turn." SJ Ex. 184 (Nov. 20, 2017 D. Fuller Dep. at 33:11-23; 55:2-11). This occurred when the vehicle was parked and tuned off. *Id.* at 33:11-23. No one has ever told her "the wheel being in a locked position at the time a vehicle is started is actually a safety mechanism that is purposefully done by manufacturers." *Id.* at 55:12-16. In fact, she testified that she has tried turning the wheel when she turned the switch and she could still not turn the key and it stayed locked. *Id.* at 60:3-10.

505. Ms. Fuller missed up to two hours of work, at \$25/hour, due to the problems with the key and ignition and the inability to start her car. SJ Ex. 189 (D. Fuller PFS Q 424 at ELPLNTFF00016646).

506. In mid-2014, Ms. Fuller received the ignition switch recall notice. SJ Ex. 184 (Nov. 20, 2017 D. Fuller Dep. at 50:5-8). On September 17, 2016, the recall repair was conducted on her vehicle. SJ Ex. 188 (GM-MDL2543-402676145).

507. Ms. Fuller does not feel the car is safe because of the ignition switch recall and she has not had a good experience with the car, testifying, “[k]nowing that there was a defect in the car, I have a problem with that. Knowing -- now reading through all of the documents that I’ve had, knowing that this car possibly -- had -- had the defect, I have a problem with that. Knowing that it was sold to me that way.” SJ Ex. 184 (Nov. 20, 2017 D. Fuller Dep. at 72:15-73:17). Ms. Fuller would not have purchased the vehicle or she would have paid less for it had she known about its defect. *Id.* at 34:3-8. She also would not have purchased her car had GM told her it had a defect that could potentially injure or kill her, and she would not have purchased it had she known her vehicle contained a defect like the ignition switch defect. *Id.* at 124:14-18; 126:5-17.

508. Ms. Fuller is relying on expert analysis and opinion to prove her damages. SJ Ex. 189 (D. Fuller PFS Q 424, 430 at ELPLNTFF00016646).

4. Michael Graciano

509. Michael Graciano purchased a used 2007 Chevrolet Cobalt, subject to Recall No. 14v047, in Arlington, Texas on October 17, 2011. SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 11:7-10; 52:3-5); SJ Ex. 191 (ELPLNTFF00006548-551); SJ Ex. 192 (ELPLNTFF00006543-544).

510. In purchasing the car for his stepdaughter Davonne Vigil, Mr. Graciano was looking for something decent, reliable, and safe. SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 56:19-25). Mr. Graciano’s fiancé and Davonne’s mother, Gina Vigil, also told Mr. Graciano that safety and reliability in the vehicle were important, and she wanted “one of the best you can get,” because the car was for their daughter. SJ Ex. 193 (G. Vigil Decl., ¶ 2); SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 63:10-19). Safety to Mr. Graciano meant “good brakes, airbag, and traction.” SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 60:10-17). A safe car to Gina meant

“[a]ir bags, traction control, ABS.” SJ Ex. 193 (G. Vigil Decl. at ¶ 2); SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 64:3-5). The salesman told Mr. Graciano and Ms. Vigil that the car was a safe and reliable vehicle for a teenager, and they relied on this representation. SJ Ex. 193 (G. Vigil Decl. at ¶ 3); SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 64:14-21). Mr. Graciano believed him “[b]ecause I’ve always liked Chevys, and I test drove a vehicle and at the time, nothing was wrong with it. I felt it drove nice, you know, for what it was. And I was comfortable with Chevys, so that’s why I decided to purchase that vehicle at that time.” SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 65:5-16; 70:24-71:5).

511. Before the recall repair, Davonne experienced approximately five to six shutdowns while driving the vehicle. SJ Ex. 193 (D. Vigil Decl. at ¶¶ 3-4). In each incident the ignition switch had moved into the “off” position. *Id.* at ¶ 4.

512. Mr. Graciano took an automotive course, testifying, “I took little technical – it’s kind of like at a community college. You just kind of volunteer to go but that’s about it,” and it included “[j]ust basic brakes, oil changes. I mean, just the basic, nothing too technical.” SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 16:15-17:2). In discussing the shutdown events his stepdaughter experienced in the Cobalt, Graciano testified, “[Davonne] just -- she just told me that the car would cut out on her. It would start right back up but she’d have to cycle the key for the actual car to start. And she didn’t know why. I didn’t know why either. I never seen that happen before.” *Id.* at 85:22-86:6. He also testified, “Davonne called me on one occasion. I just don’t remember when, asking me what’s going on with the car because she knows I know a little bit about cars. And I told her I don’t know. Does it start up again? And she was like it starts right back up again. So, I said, ‘well, I don’t know.’” *Id.* at 86:16-24. Mr. Graciano told his

fiancé Gina to have Davonne get the vehicle looked at, but “the mechanic couldn’t find out what the issue was.” *Id.* at 88:1-9; SJ Ex. 193 (G. Vigil Decl. at ¶ 4).

513. The vehicle was not in use from March 2014 to August 2014 while it awaited the recall repair. SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 104:21-25; 105:13-106:24); SJ Ex. 193 (G. Vigil Decl. at ¶ 5); SJ Ex. 194 (M. Graciano PFS Q 425 at ELPLNTFF00000511). When Mr. Graciano received the recall notice in March 2014 he told Davonne to park the car. SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 155:10-14); SJ Ex. 193 (G. Vigil Decl. at ¶ 5); SJ Ex. 192 (ELPLNTFF00006543-544). Initially the Chevy dealer refused to provide a loaner vehicle, but then on May 5, 2014, AutoNation Chevy North gave them one that Davonne used until July 30, 2014. SJ Ex. 193 (G. Vigil Decl. at ¶¶ 5, 6, 8); SJ Ex. 194 (M. Graciano PFS Q 425 at ELPLNTFF00000511). In August 2014, the ignition switch recall repair was conducted on the vehicle. SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 106:21-24); SJ Ex. 195 (GM-MDL2543-301961267).

514. Mr. Graciano incurred increased gas costs when Davonne had to drive a 1991 Buick Park Avenue for one to two months, which got worse gas mileage than the Cobalt, while the Cobalt awaited repair. SJ Ex. 193 (G. Vigil Decl. at ¶ 5); SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 40:1-9); SJ Ex. 194 (M. Graciano PFS Q 424 at ELPLNTFF00000511). He incurred gasoline costs for his brother-in-law to drive the Cobalt from Denver, CO to Arlington, TX after the recall repair was done. SJ Ex. 193 (G. Vigil Decl. at ¶¶ 7-9); SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 40:1-14); SJ Ex. 194 (M. Graciano PFS Q 424 at ELPLNTFF00000511). He incurred out-of-pocket costs to fly his brother-in-law back from Arlington, TX to Denver, CO after driving the Cobalt to Texas. SJ Ex. 193 (G. Vigil Decl. at ¶¶

7-9); SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 40:1-14); SJ Ex. 194 (M. Graciano PFS Q 424 at ELPLNTFF00000511).

515. Before this Cobalt, Mr. Graciano had never experienced one of his cars being recalled or having to take a car in for a recall repair while he owned it. SJ Ex. 190 (May 1, 2017 M. Graciano Dep. at 110:10-23). When asked his understanding of why vehicles might be recalled, he testified, “just -- simple stuff, I would guess. I mean I have never had a vehicle that I had to take in for a recall. So I didn’t just really think about it. Especially something that -- that dangerous.” *Id.* at 111:3-10.

516. Mr. Graciano realized he paid too much for the vehicle after he found out about the defect, and testified that he “would like to get reimbursed for buying an unsafe car.” *Id.* at 100:7-13; 103:20-104:5.

517. Mr. Graciano is relying on expert analysis and opinion to prove his damages. SJ Ex. 194 (M. Graciano PFS Q 424, 430 at ELPLNTFF00000511-512).

5. Lisa McClellan

518. Lisa McClellan purchased a used 2005 Malibu Max, subject to Recall No. 14v153, in Pasadena, Texas on November 22, 2010. SJ Ex. 196 (May 4, 2017 L. McClellan Dep. at 8:1-5; 27:12-23); SJ Ex. 197 (L. McClellan PFS Q 25-31 at ELPLNTFF00016767); SJ Ex. 198 (GM-MDL2543-107510293-294); SJ Ex. 199 (GM-MDL2543-107510230).

519. Ms. McClellan purchased this vehicle because she was looking for something reliable and affordable. SJ Ex. 196 (May 4, 2017 L. McClellan Dep. at 40:14-19).

520. Ms. McClellan experienced more than fifty shutdown events, and no one she took it to was able to fix it. After inspecting her vehicle, a local mechanic shop told her “there might be something wrong with the steering and something else on the column and that would be too expensive for [her] to repair.” SJ Ex. 197 (L. McClellan PFS Q 49 at ELPLNTFF00016770). In

the first incident she described, Ms. McClellan was taking a left turn and testified, “When it -- when it stalled, I tried to steer it. It wasn’t moving,” “I remember I didn’t have brakes or steering, so I was just at the mercy of the car until it came to a stop,” and “I couldn’t turn it so it was just going where it was going.” SJ Ex. 196 (May 4, 2017 L. McClellan Dep. at 69:7-10; 70:7-9; 73:20-74:6). In the second incident, she testified that the car stalled as she was completing a left turn and when she attempted to steer the car it did not work. *Id.* at 82:3-10; 85:21-86:1. In the third incident, Ms. McClellan testified she was making a left turn again, and the steering did not respond. *Id.* at 94:4-11; 95:14-18. Ms. McClellan testified that these incidents were “always when I was turning left or right, but nine times out of ten, it was a left turn.” *Id.* at 109:12-25. The “breaking point” incident was when her husband was in the car and the car shutdown on her while she was making a right turn. *Id.* at 104:6-105:6.

521. In 2011, Ms. McClellan spent \$200 on a rental car when she needed to go out of town because she was afraid to take her vehicle. *Id.* at 161:5-23. Ms. McClellan spent about \$1,500 in troubleshooting repair costs related to the defect. *Id.* at 162:13-163:7.

522. In April 2012, Ms. McClellan voluntarily surrendered the vehicle back to the dealer because of all the problems with the car. *Id.* at 29:5-6; 50:14-51:11; 106:8-10. Ms. McClellan still owed about \$2,000 left on the vehicle when she returned it and she did not pay this balance. *Id.* at 51:21-52:8. The document she signed when she relinquished the vehicle did not forgive the \$2,000 balance owed. *Id.* at 53:1-3. But Ms. McClellan’s credit report reflected more than just the \$2,000 loan balance when she returned the vehicle because by then she had incurred fees for nonpayment of the remaining \$2,000. *Id.* at 51:21-52:8; 158:20-159:25. Ms. McClellan moved twice since she owned the vehicle and during that time she got rid of documents related to the car because she no longer owned it. *Id.* at 53:20-54:1; 115:19-25.

523. Ms. McClellan found out about the recalls in 2016. *Id.* at 131:21-132:17. She testified, “I have always been a Chevrolet consumer and an informed consumer. I am disappointed that no one ever told me about the issues with the Malibu. I never knew there was any kind of recall or problem.” SJ Ex. 197 (L. McClellan PFS Q 437 at ELPLNTFF00016816). She testified, “I think it could have been prevented if there was a -- a recall on these items or whatever, I’m sure that they knew -- GM knew that there was problems with the car and just weren’t saying,” and when asked why she thinks GM knew about the defect she testified, “Well, they made the car. They designed the car. They engineered the car. They’ve sold the cars so if I build you a house and it falls down on your head, you know, you’re going to pretty much come to me about it, not someone else so...” SJ Ex. 196 (May 4, 2017 L. McClellan Dep. at 144:20-145:8). She believes she overpaid for the car “not knowing that it had problems.” *Id.* at 156:4-8. Ms. McClellan did not know her vehicle had any defects when she owned it, but she does now. *Id.* at 65:9-16.

524. Ms. McClellan would not have purchased the vehicle if GM had told her it had a defect that could potentially injure or kill her. *Id.* at 176:16-21.

525. Ms. McClellan is relying on expert analysis and opinion to prove her damages. SJ Ex. 197 (L. McClellan PFS Q 424, 430 at ELPLNTFF00016814-815).

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HAGENS BERMAN SOBOL SHAPIRO LLP

By: /s/ Steve W. Berman

Steve W. Berman

steve@hbsslaw.com

Sean R. Matt

sean@hbsslaw.com

Andrew M. Volk

andrew@hbsslaw.com

HAGENS BERMAN SOBOL SHAPIRO LLP

1301 Second Avenue, Suite 2000

Seattle, WA 98101

Telephone: (206) 623-7292

Facsimile: (206) 623-0594

DATED: October 7, 2019

LIEFF CABRASER HEIMANN & BERNSTEIN, LLP

By: /s/ Elizabeth J. Cabraser

Elizabeth J. Cabraser

ecabraser@lchb.com

Rachel Geman

rgeman@lchb.com

275 Battery Street, 29th Floor

San Francisco, CA 94111

Telephone: (415) 956-1000

Facsimile: (415) 956-1008

*Co-Lead Counsel with Primary Focus on Economic
Loss Cases*

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the above document was served upon the attorney of record for each other party through the Court's electronic filing service on October 7, 2019, which will send notification of such filing to the e-mail addresses registered.

/s/ Steve W. Berman

Steve W. Berman